



SouthGobi
RESOURCES

NI 43-101 TECHNICAL REPORT OVOOT TOLGOI COAL MINE SOUTHGOBI PROVINCE MONGOLIA

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

BAW Mineral Partners Limited ("BAW") was engaged by SouthGobi Resources Ltd. (the "Client" or "SQR") in November 2023 to prepare this Technical Report (the "TR"). Subsequent to BAW's visit to the Ovoot Tolgoi Coal Mine (the "Coal Mine") and, BAW prepared this TR with an effective date of December 31, 2023, dated December 2, 2024, which covers the resource estimates and reserve estimates as of December 31, 2023. The purpose of this TR is to provide an independent technical assessment of the mining properties as of December 31, 2023, in relation to its various aspects, in particular, project geology, drilling, sampling, sample preparation, resource estimates, mine planning, past production, reserve estimates, coal handling and processing, capital costs, operating costs and economic analysis with reference to the requirements of Canadian National Instrument 43-101 ("NI 43-101").

1.2 PROPERTY DESCRIPTION AND LOCATION

The Ovoot Tolgoi Coal Mine is comprised of Sunrise Pit, Sunset Pit, B Field Prospect, and C Field Prospect which are situated in the southwest corner of the Umnugobi Aimag (South Gobi province), approximately 320 kilometres ("km") southwest of the provincial capital of Dalanzadgad and 950 km south of the nation's capital Ulaanbaatar. Ceke border crossing and the Mongolian-Chinese border are situated around 45 km south of the Coal Mine. The primary delivery hub of the Ovoot Tolgoi coal is in Ceke, the People's Republic of China ("PRC").

SQR holds its interest in the Ovoot Tolgoi Coal Mine through its wholly owned subsidiary, SouthGobi Sands LLC ("SGS"). SGS is the operating company under SQR and is a company incorporated in Mongolia that holds the mining licenses of the Coal Mine.

1.3 GEOLOGICAL SETTING AND MINERALIZATION

The southern region of Mongolia reflects a complex geologic history of continental accretion and Basin and Range style crustal extension, followed by regional-scale compressional folding

and faulting. It is mainly composed of elongate, east-west trending mountain ranges, characterized by crystalline basement rocks dominated by intermediate to high angle faults, and intervening basins. Those structures are dominantly composed of Late Cretaceous to Permian-aged sedimentary sequences, overlain by Quaternary unconsolidated sediments. The arcuate, east-west-trending, moderately dipping Nariin Sukhait fault, where the Middle Jurassic coal-bearing sequences are exposed, is the most prominent structure in relation to the Ovoot Tolgoi Deposit. Moreover, the Nariin Sukhait fault extends latitudinally along the edge of the Ovoot region, with coal-bearing conglomerate sandstones on its southern flank and Quaternary sediments on its northern flank. The Coal Mine is one of the five operating coal mines in the region of Nariin Sukhait. It comprises of the Sunset Pit in the west and the Sunrise Pit in the east.

Seam Groups including Seam Nos. 4, 5L, 5U, 6, 7, 8, 9, 10 and 11 were identified based on the current geological understanding of the deposit. Each of the Seam Groups is further divided into several sub-layers or known as plies based on parting material within the Seam Groups.

The overall estimated thickness of the coal-bearing sedimentary sequence is 1,370 m wherein the cumulative thickness of the coal seams ranges from 68 to 250m. Interburden between the coal seams is dominated by sandstones and conglomerates, whereas partings within the coal seams are mostly mudstones and carbonaceous mudstones.

The main coal resources of the Ovoot Tolgoi Coal Mine are contributed by Seam No. 5L and 5U which are identified in both the Sunset and Sunrise Pits. In the Sunrise Pit, Seam No. 6 and 7 are identified which could potentially be related to Seam Groups 8, 9, and 10 identified at the Sunset Pit.

1.4 DEPOSIT TYPES

BAW's technical review of the drillhole data, resource model and on-site assessment indicated that the Coal Mine has been subjected to a significant amount of tectonic deformation, characterized by an east-west-trending regional thrust fault with the hanging wall strata

modified by different secondary folding. Coal seams are typically dipping at an angle ranging from 35° to 55° and are occasionally sub-vertically dipping.

BAW's further review indicated that the previous Geology-Type classification of the Ovoot Tolgoi Coal Deposit in the 2017 Technical Report by Dragon Mining Consulting Ltd (“DMCL”) as Complex is strongly justified by the current observation. Tight folds, steeply inclined and overturned beds, were not widely present whereas large displacement faults are generally absent in both Sunrise and Sunset Pits of the Coal Mine. Although there are occasional fault movements, stratigraphic sequences are normally retained, and seam thicknesses and continuity have not been substantially modified from their pre-deformational thickness.

BAW's technical review of the B Field Prospect indicated that less drilling and technical studies have been completed relative to the producing pits, leading to a preliminary stage of structural comprehension. Currently, the B Field Prospect is categorized under the Severe Geology-Type due to the presence of tight folds, steeply inclined beds, and faulting observed in the core samples and neighboring operational mine. Coal seams within the B Field Prospect typically dip from 12° to 83°.

1.5 COAL QUALITY

Coal quality of each seam group, confined to the in-pit resource (depth within 300m below ground surface), and based on SGS's latest resource model as of December 31, 2023, is collected and categorized by product ash classifications as shown in Table 1-1, Table 1-2 and Table 1-3.

Table 1-1. Coal Quality by Seam Group – Sunrise Pit

<i>Seam Group</i>	<i>TM</i> %	<i>IM</i> %, <i>ad</i>	<i>ASH</i> %, <i>db</i>	<i>VM</i> %, <i>daf</i>	<i>FC</i> %, <i>ad</i>	<i>TS</i> %, <i>ad</i>	<i>G_{R,I}</i>	<i>SG</i> g/mm ³	<i>CV</i> cal/g, <i>db</i>
Ash <=10%									
5L	8.18	0.97	8.09	33.85	56.77	0.83	61.6	1.35	7,083
5U	8.46	1.11	7.88	34.22	57.05	0.88	65.6	1.34	7,066
6L	10.01	1.07	7.62	33.93	56.75	0.83	75.3	1.31	7,122
6U	11.01	1.04	8.55	34.04	56.40	0.95	51.9	1.37	7,196

<i>Seam Group</i>	<i>TM %</i>	<i>IM %, ad</i>	<i>ASH %, db</i>	<i>VM %, daf</i>	<i>FC %, ad</i>	<i>TS %, ad</i>	<i>G_{R,I}</i>	<i>SG g/mm³</i>	<i>CV cal/g, db</i>
7L	8.59	1.39	7.82	35.30	58.74	0.96	76.1	1.30	6,882
Average	9.25	1.12	7.99	34.27	57.14	0.89	66.1	1.33	7,070
10%<Ash <=15%									
5L	8.40	0.97	12.20	33.86	53.48	1.04	57.2	1.38	6,669
5U	8.02	1.10	12.11	34.26	53.63	0.99	58.4	1.81	6,665
6L	8.17	1.13	12.34	34.71	51.22	0.91	68.6	1.34	6,443
6U	9.21	1.29	11.94	35.66	53.30	1.02	53.8	1.37	6,613
7L	8.53	1.26	12.10	35.18	51.49	1.02	45.5	1.38	6,577
Average	8.47	1.15	12.14	34.73	52.62	1.00	56.7	1.45	6,594
15%<Ash <=25%									
5L	7.75	1.05	18.89	33.43	48.63	1.12	41.8	1.43	6,029
5U	8.11	1.27	19.28	33.83	48.04	1.19	44.5	1.42	5,982
6L	8.89	1.04	19.24	36.09	46.92	1.11	59.8	1.46	5,786
6U	7.22	0.92	20.31	34.90	44.18	1.22	51.2	1.40	5,744
7L	9.47	2.24	20.35	33.04	44.36	0.80	23.1	1.38	5,716
Average	8.29	1.30	19.62	34.26	46.43	1.09	44.1	1.42	5,851
Ash >25%									
5L	7.14	0.90	31.34	32.89	39.18	1.10	22.3	1.55	4,988
5U	7.66	1.05	31.76	34.80	37.54	1.29	18.5	1.54	4,802
6L	6.63	1.19	30.45	33.98	36.28	1.31	56.1	1.58	4,856
6U	8.54	1.31	30.55	32.99	36.60	1.02	24.8	1.49	4,361
7L	10.13	1.15	29.34	32.22	35.80	1.20	21.4	1.47	4,679
Average	8.02	1.12	30.69	33.37	37.08	1.19	28.6	1.53	4,737

Table 1-2. Coal Quality by Seam Group – Sunset Pit

<i>Seam Group</i>	<i>TM %</i>	<i>IM %, ad</i>	<i>ASH %, db</i>	<i>VM %, daf</i>	<i>FC %, ad</i>	<i>TS %, ad</i>	<i>CS N</i>	<i>G_{R,I}</i>	<i>SG g/mm³</i>	<i>CV cal/g, db</i>
Ash <=10%										
5U	3.61	1.39	6.31	34.68	58.65	0.76	5.2	-	1.31	7,557
5L	4.56	1.39	6.21	33.50	59.59	0.77	4.1	69.2	1.31	7,525
8	5.33	2.60	7.80	35.81	54.29	1.33	3.7	92.9	1.37	7,311
9	4.99	1.78	8.10	34.90	56.51	1.31	4.3	80.6	1.33	7,346
10	5.93	2.36	8.05	35.01	55.79	1.28	4.2	-	1.33	7,317
Average	4.03	1.48	6.50	34.48	58.51	0.83	4.8	80.6	1.32	7,523

<i>Seam Group</i>	<i>TM %</i>	<i>IM %, ad</i>	<i>ASH %, db</i>	<i>VM %, daf</i>	<i>FC %, ad</i>	<i>TS %, ad</i>	<i>CS N</i>	<i>G_{R,I}</i>	<i>SG g/mm³</i>	<i>CV cal/g, db</i>
10%<Ash <=15%										
5U	3.41	1.49	12.46	33.82	52.91	1.05	4.8	-	1.39	6,996
5L	4.05	1.56	11.94	33.64	53.87	1.07	3.6	59.7	1.37	6,962
8	5.13	2.31	12.55	34.72	51.44	1.32	3.4	-	1.37	6,981
9	5.96	2.39	12.22	33.49	52.80	1.43	3.7	75.1	1.35	6,942
10	5.10	1.74	12.43	34.01	52.94	1.53	3.6	-	1.38	6,943
Average	4.66	1.83	12.32	33.81	52.96	1.28	4.0	67.4	1.37	6,963
15%<Ash <=25%										
5U	3.47	1.84	18.89	32.51	47.15	1.01	3.8	-	1.45	6,425
5L	4.07	1.81	19.43	31.58	47.59	1.16	2.8	57.2	1.45	6,336
8	5.23	2.33	19.42	32.19	46.55	1.36	2.4	-	1.46	6,338
9	5.49	1.62	18.88	32.73	47.27	1.54	3.4	53.2	1.43	6,387
10	5.26	1.64	19.27	32.35	47.39	1.43	2.9	-	1.44	6,317
Average	4.77	1.74	19.15	32.34	47.29	1.32	3.1	55.2	1.44	6,355
Ash >25%										
5U	3.54	1.61	31.05	28.72	38.46	1.06	3.1	-	1.58	5,348
5L	3.94	1.83	31.01	27.68	39.14	1.04	1.8	14.0	1.56	5,347
8	4.97	2.26	31.24	28.34	37.93	1.06	1.4	2.7	1.56	5,292
9	6.04	1.82	32.02	28.57	37.37	1.65	2.2	44.0	1.55	5,209
10	4.78	1.56	31.24	28.21	38.37	1.24	1.7	-	1.58	5,249
Average	4.55	1.70	31.24	28.31	38.34	1.20	2.1	14.0	1.57	5,282

Table 1-3. Coal Quality by Seam Group - B Field Prospect

<i>Seam Group</i>	<i>TM %</i>	<i>IM %, ad</i>	<i>ASH %, db</i>	<i>VM %, daf</i>	<i>TS %, ad</i>	<i>G_{R,I}</i>	<i>SG g/mm³</i>	<i>CV cal/g, db</i>
1	6.88	1.48	16.49	42.72	1.14	58.89	1.33	6,370
2	8.06	1.63	17.96	41.18	1.18	58.68	1.33	6,200
3	8.29	1.53	17.01	42.03	1.41	67.72	1.34	6,390
4	7.71	1.57	17.51	41.47	1.61	65.46	1.37	6,347
6	4.23	1.71	10.33	42.43	1.10	63.94	1.33	6,908
7	3.59	1.73	15.02	41.04	1.23	36.33	1.33	6,355
8	4.34	1.65	15.53	41.48	1.23	60.06	1.33	6,454
9	4.31	1.59	17.07	41.40	1.26	47.33	1.34	6,301
10	4.17	1.58	19.14	40.81	1.43	33.27	1.37	6,096
Average	5.73	1.61	16.23	41.62	1.29	54.63	1.34	6,380

Coal quality of both Sunrise and the Sunset Pits generally indicate a strong continuity within the same coal seams. The majority of Seam 5U and 5L of both Sunrise Pit and Sunset Pit are A Coal product in which they accounted for 56.78% of the total saleable coal products in 2023.

B Field coal quality varies between coal seams but generally are characterized with low ash (<20%), moderate sulfur content (<1.5%), low inherent moisture (<2%). Free Swelling Index (FSI) values are limited and indicate both non-coking (<2 FSI) and coking coal properties (>4 FSI).

1.6 RESOURCE ESTIMATE

The Resources of the Coal Mine has been estimated by BAW as of December 31, 2023, using the 3D resource models provided by SGS as shown in Table 1-4 until Table 1-6. At present, there are no resources estimated for the C Field Prospect as further drilling is required. In this TR, BAW divided the resource estimation into in-pit resource, surface resource and underground resource. The in-pit resource is a portion of the surface resource (depth <300 m from surface) based on the ultimate pit design provided by SGS. The underground resource covers a depth from 300 to 500 m below surface. The key assumptions used for the resource estimation are:

- Minimum coal seam thickness = 0.6 m.
- Maximum coal parting = 0.3 m.
- Maximum ash content of 50% was used for the Measured and Indicated Resources.
- In-pit Resources are constrained to a depth of 300 m below surface and the ultimate pit design used in the 2017 Technical Report.
- Surface Resources are constrained to a depth of 300 m below surface and are inclusive of in-pit Resources.
- Underground Resources are constrained to a depth of 300 m - 500 m below surface.
- Volumes are converted to tonnages using laboratory relative density analytical results converted to an estimated in-situ basis.
- Resource is constrained to the mining lease held by SGS only.

- Resource is estimated on an in-situ basis (i.e. as an in-situ tonnage and not adjusted; for mining recovery).
- Resource is depleted by mined out tonnage.
- Measured and Indicated Resources are inclusive of those Mineral Resources modified to produce the Reserves, i.e. Reserves are not additional to Resources.
- Resource is estimated based on the survey data made available as of December 31, 2023, for the Sunrise and Sunset Pits and B Field Prospect, respectively.
- Totals may not add up due to rounding.

Table 1-4. In-pit Resource Estimate of the Coal Mine as of December 31, 2023

<i>Coal Field</i>	<i>Seam Group</i>	<i>In-Pit Resource (Mt)</i>			
		<i>Measured</i>	<i>Indicated</i>	<i>Measured+Indicated</i>	<i>Inferred</i>
Sunrise Pit	7	0.37	0.28	0.65	0.71
	6	0.34	1.03	1.37	0.52
	5U	17.03	7.74	24.77	1.02
	5L	10.15	2.13	12.28	0.54
	4	0.76	0.83	1.59	0.08
	Sub-total	28.65	12.01	40.66	2.87
Sunset Pit	10	7.55	0.26	7.81	0.00
	9	4.72	0.37	5.09	0.00
	8	1.04	0.09	1.13	0.00
	5U	16.03	0.10	16.13	0.00
	5L	13.33	0.33	13.66	0.00
	Sub-total	42.67	1.15	43.82	0.00
B Field Prospect	10	0.26	0.54	0.80	0.90
	9	0.31	1.11	1.42	1.18
	8	0.10	0.28	0.38	0.24
	7	0.00	0.00	0.00	0.00
	6	0.00	0.00	0.00	0.00
	Sub-total	0.67	1.93	2.60	2.32

	Grand Total	72.00	15.08	87.08	5.19
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Table 1-5. Surface Resource Estimate of the Coal Mine as of December 31, 2023

<i>Coal Field</i>	<i>Seam Group</i>	<i>Surface Resource (Mt)</i>			
		<i>Measured</i>	<i>Indicated</i>	<i>Measured+Indicated</i>	<i>Inferred</i>
Sunrise Pit (depth <300m)	7	1.00	1.77	2.77	4.68
	6	2.17	3.04	5.21	4.07
	5U	34.13	31.33	65.46	26.49
	5L	16.16	4.98	21.14	1.36
	4	1.52	1.84	3.36	1.30
	Sub-total	54.98	42.96	97.94	37.90
Sunset Pit (depth <300m)	10	21.43	3.24	24.67	1.24
	9	10.54	3.50	14.04	0.87
	8	1.84	2.07	3.91	0.61
	5U	23.19	1.36	24.55	0.06
	5L	20.08	1.69	21.77	0.21
	Sub-total	77.08	11.86	88.94	2.99
B Field Prospect (depth <300m)	10	0.67	1.64	2.31	5.21
	9	0.88	2.63	3.51	6.71
	8	0.67	1.50	2.17	3.48
	7	0.26	2.01	2.27	5.87
	6	0.00	0.18	0.18	0.21
	Sub-total	2.48	7.96	10.44	21.48
	Grand Total	134.56	62.78	197.34	62.38

Table 1-6. Underground Resource Estimate of the Coal Mine as of December 31, 2023

<i>Coal Field</i>	<i>Seam Group</i>	<i>Underground Resource (Mt)</i>			
		<i>Measured</i>	<i>Indicated</i>	<i>Measured+Indicated</i>	<i>Inferred</i>
Sunrise Pit (depth from 300m to 500m)	5U	3.29	8.78	12.07	17.20
	5L	6.19	13.76	19.95	27.93
	4	0.98	2.66	3.64	4.06
	Sub-total	10.46	25.20	35.66	49.19
Sunset Pit (depth from 300m to 500m)	10	17.76	3.95	21.71	2.85
	9	8.16	1.40	9.56	1.16
	8	0.28	0.63	0.91	1.16
	5U	25.54	4.43	29.97	2.74
	5L	18.29	5.33	23.62	2.84
	Sub-total	70.03	15.74	85.77	10.75
B Field Prospect (depth from 300m to 500m)	10	0.00	1.07	1.07	1.07
	9	0.00	0.51	0.51	0.51
	8	0.00	0.70	0.70	0.70
	7	0.00	1.43	1.43	1.47
	6	0.00	0.14	0.14	0.14
	Sub-total	0.00	3.85	3.85	3.89
	Grand Total	80.49	44.79	125.27	63.83

Table 1-7. Surface and Underground Resource Estimate of the Coal Mine as of December 31, 2023

<i>Coal Field</i>		<i>Surface and Underground Resource (Mt)</i>			
		<i>Measured</i>	<i>Indicated</i>	<i>Measured+Indicated</i>	<i>Inferred</i>
Sunrise Pit	Surface	54.98	42.96	97.94	37.90
	Underground	10.46	25.20	35.66	49.19
Sunset Pit	Surface	77.08	11.86	88.94	2.99
	Underground	70.03	15.74	85.77	10.75

B Field Prospect	Surface	2.48	7.96	10.44	21.48
	Underground	0.00	3.85	3.85	3.89
Grand Total		215.03	107.57	322.60	126.20

1.7 RESERVE ESTIMATE

The Reserves of the Coal Mine and B Field have been estimated as of December 31, 2023, based on the resource model provided by SGS and the long-term mine plan completed for the Sunset and Sunrise Pits. No Reserves were estimated for the B Field Prospect and C Field Prospect at this time in the absence of mine planning and detailed technical studies. The key assumptions used for the reserve estimation are:

- Measured and Indicated Resources are inclusive of those Mineral Resources modified to produce the Reserves.
- Reserves do not include any Inferred Resources, including those that have been treated as waste (i.e. its mining costs have been covered but no revenue has been assumed for the Inferred Resources).
- The mining method selected is a truck-and-shovel open pit terrace mining operation.
- Cut-off ash content for raw coal is assumed to be 50%.
- A mining recovery factor of 95% and a mining dilution factor of 2.5% are applied in the Reserve estimates.
- The pits and thus Reserves are designed to 300m below the original ground surface.
- Reserves are constrained to the mining lease held by SGS only although the open pit limits will extend across the lease boundary into the adjacent lease held by Mongolyn Alt Corporation (MAK). SGS and MAK have an agreement in place that allows SGS to strip off the overburden in MAK's concession. MAK will remove the coal within its concession to allow development of SGS's pits. Coal within MAK's concession has been treated with no revenue and no cost whereas the waste within the pits and MAK's concession will be stripped off at the cost of SGS.
- Reserves are estimated to account for coal and waste that was mined as of December 31, 2023.

- The coal price adopted in the Reserve estimates is US \$90/t.
- Totals may not add up due to rounding.

Table 1-8. Reserve Estimate of the Coal Mine

<i>Coal Field</i>	<i>Seam Group</i>	<i>Reserve (Mt)</i>		
		<i>Proven</i>	<i>Probable</i>	<i>Total</i>
Sunrise Pit	7	0.36	0.28	0.64
	6	0.33	1.00	1.33
	5U	16.58	7.53	24.12
	5L	9.89	2.07	11.96
	4	0.74	0.81	1.55
	Sub-total	27.90	11.69	39.59
Sunset Pit	11	0.00	0.00	0.00
	10	7.35	0.25	7.60
	9	4.60	0.36	4.95
	8	1.02	0.09	1.10
	5U	15.61	0.10	15.71
	5L	12.98	0.32	13.31
	Sub-total	41.56	1.12	42.68
	Grand Total	69.46	12.81	82.26

1.8 MINING

The mining operation at the Coal Mine includes using open pit terrace truck-and-shovel mining methods, similar to the current mining methods employed, which could be described as open pit terrace mining utilizing hydraulic excavators, shovels and trucks, or known as conventional "truck/shovel" operations. The operation includes top-soil stripping, drilling, and blasting of overburden and interburden, and stripping of waste and coal using a backhoe excavator. Waste and coal will be loaded onto a fleet of mining trucks for hauling to the waste dumps or the coal stockpiles, as appropriate.

The updated long-term mine plan for both the Sunrise and Sunset Pits aims to achieve an overall production target of 9.0 million tonne per annum ("mtpa") of Run-of-Mine ("ROM") coal starting from 2017 and mining in both pits at the same time. Mining is scheduled to be completed by 2030 with a total Life-of-Mine ("LOM") of 14 years. However, the planned production target has never been achieved and only reached a peak production of 6.38 Mt in 2017 prior to the COVID-19 pandemic and started to recover again producing 3.75 Mt in 2023 post pandemic.

BAW estimated ROM coal from the Proven and Probable Reserve for the Sunset and Sunrise Pits. The key assumptions were: 1) a mining recovery of 95% and dilution of 2.5% by the weight of coal adopted to account for the mining losses and dilutions, and 2) statistics of raw coal ash content ranges from coal sample data is applied to estimate annual ROM coal quantities based on ash content categories. Long-term mine plan is confined within the ultimate pit shells.

Table 1-9. Annual Production and Waste Schedule of the Sunset and Sunrise Pits

Year		Sunrise Pit			Sunset Pit			Combined		
		ROM	Waste	Strip Ratio	ROM	Waste	Strip Ratio	ROM	Waste	Strip Ratio
		Kt	k BCM	BCM/tonne	kt	k BCM	BCM/tonne	kt	k BCM	BCM/tonne
1	2024	1,972	5,936	4.1	2,508	8,820	4.8	4,480	14,756	4.5
2	2025	2,016	4,985	3.4	2,391	9,878	5.7	4,407	14,863	4.6
3	2026	1,974	5,138	3.6	2,493	10,030	5.5	4,466	15,168	4.7
4	2027	2,094	6,366	4.2	2,371	8,254	4.8	4,464	14,621	4.5
5	2028	2,073	5,264	3.5	2,483	10,422	5.8	4,556	15,686	4.7
6	2029	2,086	5,658	3.7	2,431	10,317	5.8	4,517	15,975	4.9
7	2030	2,004	5,879	4.0	2,472	10,366	5.8	4,477	16,244	5.0
8	2031	2,167	7,011	4.5	2,502	9,891	5.4	4,669	16,902	5.0
9	2032	2,003	8,339	5.7	2,448	7,746	4.4	4,451	16,086	5.0
10	2033	2,062	9,019	6.0	2,539	6,355	3.4	4,601	15,374	4.6
11	2034	2,146	9,278	6.0	2,486	4,558	2.5	4,632	13,836	4.1
12	2035	2,108	8,192	5.4	2,356	4,258	2.5	4,464	12,451	3.8
13	2036	2,147	7,500	4.8	2,439	4,473	2.5	4,586	11,973	3.6
14	2037	2,196	7,121	4.5	2,448	4,610	2.6	4,643	11,731	3.5
15	2038	2,193	6,739	4.2	2,490	4,482	2.5	4,683	11,221	3.3
16	2039	2,107	6,551	4.3	2,426	4,248	2.4	4,533	10,798	3.3
17	2040	2,169	5,484	3.5	2,448	3,942	2.2	4,617	9,426	2.8
18	2041	2,073	1,627	1.1	945	1,552	2.3	3,018	3,179	1.5

19	2042	2,000	1,610	1.1	N/A	N/A	N/A	2,000	1,610	1.1
Total		39,588	117,697	4.1	42,676	124,204	4.0	82,263	241,900	4.1

1.9 COAL PROCESSING

In early 2016, SQR and SGS formulated optimized mining, coal processing and sales strategies for the Coal Mine such that SQR is determined to haul the ROM coal to the processing facilities to be constructed at the mine site for complete processing before sales.

The proposed coal handling and processing consists of four stages, namely: screening, sorting, wet washing, and quality control, delivering three types of finished coal products including 1/3 coking coal, thermal coal with a calorific value of 6,200 kcal/kg and thermal coal with a calorific value of 5,800 kcal/kg. Such multiple coal products are expected to maximize the value of the Coal Mine.

Since 2017, the wash plant has been put into operation to process WF Coal (washed) into WA Coal (washed), WB Coal (washed) or F Coal separately. In 2019, the mobile screen and the pneumatic separation plant were installed and commissioned for handling and producing WF Coal from F Coal.

We understand that the wash plant, to optimize its operation, is working on technical solutions to address various issues such as throughput, dewatering circuits, raw coal feeder and power supply.

1.10 ECONOMIC ANALYSIS

Based on the estimated coal prices and revenue, operating costs, capital costs, taxes and government charges, the Net Present Value ("NPV") of the Coal Mine is estimated to be about US\$146 million at a discount rate of 15%. Like most mining projects in the world, the NPV estimate is the most sensitive to commodity prices.

1.11 RECOMMENDATIONS

- Downhole surveys of verticality should be continuously carried out for future drilling programs to enhance the accuracy of the resource model and hence, resource estimation. This will be an ongoing annual cost of approximately US\$ 10,000.
- Routine data validation and verification should be continued for additional exploration data as an integral part of the database management system. No cost impact.
- The resource model should be updated on an on-going basis as new exploration and coal quality data progress to develop a better understanding of the geology and coal quality for refining the mine plan in the future. This will be an ongoing annual cost of approximately US\$ 20,000.
- Wedge structures have been identified in both pits. A detailed geotechnical assessment of pit wall stability is recommended to be an integral part of a short-term mine plan and detailed mine design. This will be an ongoing annual cost of approximately US\$ 50,000.
- Long-term and continuous monitoring, analysis, review and reporting of the pit wall stability should be considered as a routine practice to ensure production and also safety of the workers. No cost impacts.
- Hydrogeological data should be reviewed on an on-going basis, and it is recommended to be an integral part of the short-term mine plan and detailed mine design. This will be an ongoing annual cost of approximately US\$ 20,000.
- Routine monitoring will be conducted for employment of pit dewatering system as appropriate to enhance pit wall stability and reduce pit seepage, if necessary, with the pit development. No cost impact.
- The mining operation should implement the updated mine plan to achieve the goals set out by the latest mining strategy, processing strategy and sales strategy. No cost impact.
- The resource model should be updated by integrating additional validated coal sample analysis data, geological and geotechnical findings from exposures of mine

pits to enhance the development of a detailed monthly production schedule and reserve database. No cost impact.

- Reconciliation between planned and actual production should be continued as a good mining practice. No cost impact.
- Characterization and assessment of the coal quality of individual coal seams, particularly Seam No. 5 should be continued in an ongoing basis to develop a better understanding of the spatial distribution of coal quality in the pit as it offers the best quality of coal products and contributes to most of the production. Ongoing coal quality characterization may also benefit the processing strategy and hence, a better product mix for SGS. This will be an ongoing annual cost of approximately US\$ 20,000.
- It is important to ensure a steady and consistent feed of raw coal into the jig box, taking into consideration the size description and processing capabilities. To achieve feed stability, a mobile screen can be used to handle the ROM coal as WF (Wash Feed). Once a steady feed is achieved, the production of clean coal can be easily switched from one grade (WA) to another (WB), considering the desired clean coal ash level. This switch allows for running the process at high efficiency and reducing operation hours. The mobile screen is estimated to be US\$ 60,000.
- It is recommended to upgrade the capacity of the secondary bucket elevator to match the size of the first elevator. By doing so, the processing circuits capacity can be increased, allowing for a higher volume of coal to be processed. The upgrading cost is estimated to be US\$98,000.
- It is recommended to initiate a technical study that focuses on optimizing the processing of fine coal and overcoming the dewatering issues encountered in the tailing treatment. The estimated cost for the study is \$20,000.
- It is necessary to apply high-efficiency thickener prior to the fine coal processing since it can be very helpful for the clean coal production in the wash plant. This approach promotes sustainable water management practices and helps mitigate the impact on local water resources. The estimated cost for the upgrading of the thickening circuits is estimated to be US\$80,000.
- To maximize revenue and optimize the clean coal product in the plant, it is essential to consider the coking properties and ash contents of different coal grades. In

addition to coking properties and ash contents, other factors such as market demand, customer preferences, and pricing trends should also be considered. It's important to note that the optimal clean coal product mix may vary based on market conditions and the specific characteristics of A Coal, A⁻ Coal and B Coal. Regular monitoring and analysis of market dynamics and coal quality parameters are crucial for adjusting the production strategy and maximizing revenue from clean coal products. No cost impacts.

- The optimization of clean coal production should not be limited to the processing circuits alone. The entire coal product in the mine, including A Coal, A⁻ Coal and B Coal, should be considered. By integrating the ROM sorting section and processing circuits with the total coal product strategy, the overall clean coal yield and quality can be improved leading to higher efficiency and improved revenue generation. No cost impact for the production efficiency improvement.
- The presence of coal dust on the ground at the air jet plant, resulted from the separating and handling processes, presents an opportunity to explore its potential for utilization. Further study and analysis of this dust, in conjunction with the fine clean coal mentioned earlier, can help identify potential uses and determine the most effective methods for harnessing the calorific value of the dust. The cost for the study is estimated to be US\$50,000.
- Further core drilling is recommended for the B Field Prospect to thoroughly assess the metallurgical characteristics of the coal seams and to increase the confidence level of resource estimation.

2. INTRODUCTION

2.1 GENERAL BACKGROUND AND SCOPE OF WORK

Mr. Jaydee Ammugauan (MAIG), Mr. Tao Xu (P. Eng) and Mr. Larry Li (P. Eng) of BAW prepared this Technical Report for SQR on the Coal Mine located in Mongolia, which is owned 100% by SQR through SGS, in accordance with NI 43-101.

The scope of work of BAW's engagement is as follows:

- Review of all the available technical information provided by SGS;
- Visit the Coal Mine in Mongolia;
- Prepare an updated resource estimate;
- Prepare an updated reserve estimate;
- Review of processing and recovery operations;
- Review of capital expenditure and operating costs; and
- Prepare an updated technical report for public disclosure.

Mr. Ammugauan, Mr. Xu and Mr. Li have jointly inspected the Coal Mine on February 28 to March 6, 2024. All the QPs have inspected the mining operations in both the Sunset and Sunrise Pits, coal stockpile, waste dump, coal handling facilities, mobile workshop, explosive storage and CCIC onsite coal testing laboratory. They have also inspected a few drillholes on the ground as well as the core drilled in 2023.

Following SQR's request to include an initial NI 43-101 compliant resource estimate for the B Field Prospect, Mr. Ammugauan conducted a follow-up site visit from August 23 to August 25, 2024.

Each QP is responsible for the preparation and supervision of the following sections of the TR:

Section	QP Responsible
1. Summary	Jaydee Ammugauan/Tao/Xu/Larry Li
2. Introduction	Jaydee Ammugauan
3. Reliance on Other Experts	Jaydee Ammugauan/Tao Xu/Larry Li

4. Property Description	Jaydee Ammugauan
5. Accessibility and Climate	Jaydee Ammugauan
6. History	Jaydee Ammugauan
7. Geological Setting and Mineralization	Jaydee Ammugauan
8. Deposit Types	Jaydee Ammugauan
9. Exploration	Jaydee Ammugauan
10. Drilling	Jaydee Ammugauan
11. Sample Preparation	Jaydee Ammugauan
12. Data Verification	Jaydee Ammugauan
13. Mineral Processing and Metallurgical Testing	Larry Li
14. Resource Estimation	Jaydee Ammugauan
15. Reserve Estimation	Tao Xu
16. Mining Methods	Tao Xu
17. Recovery Methods	Larry Li
18. Project Infrastructures	Tao Xu
19. Market Studies and Contract	Tao Xu
20. Environmental Studies	Jaydee Ammugauan
21. Capital and Operating Costs	Tao Xu
22. Economic Analysis	Tao Xu
23. Adjacent Properties	Jaydee Ammugauan
24. Other Relevant Data and Information	Jaydee Ammugauan
25. Interpretation and Conclusion	Jaydee Ammugauan, Tao Xu and Larry Li
26. Recommendations	Jaydee Ammugauan, Tao Xu and Larry Li
27. References	Jaydee Ammugauan, Tao Xu and Larry Li

2.2 SOURCES OF INFORMATION

This TR is based on the technical review by BAW of the property, historic reports and prior technical reports made available to BAW by SGS up until December 2023. SGS is the 100% owned Mongolian-registered subsidiary that holds the licenses and permits to the Project as well as operating the mine. Technical reports and other reports that BAW extensively referred to are listed below.

- SouthGobi Sands LLC ("SGS"), the 100% owned Mongolian-registered subsidiary that holds the licenses and permits to the Project as well as operating the mine, in conjunction with Sapphire Geo Ltd ("Sapphire")
- Norwest Corporation, 2006. Groundwater and Surface Water Hydrology Report, Nariin Sukhait 2006 Investigation, Mongolia.
- Norwest Corporation, 2007a. Technical Report, Coal Geology and Resources, Narin Sukhait Property, Omnogovi Aimag, Mongolia.
- Norwest Corporation, 2007b. Technical Report of Ovoot Tolgoi Underground Mining Potential.
- Norwest Corporation, 2007c. Technical Report of Coal Geology and Resources, Ovoot Tolgoi Property, Omnogovi Aimag, Mongolia.
- The Americas Group, 2008. Technical Report: Surface Coal Geology and Resources, Ovoot Tolgoi West Field, Omnogovi Aimag, Mongolia.
- The Americas Group, 2008. Technical Report: Underground Resources at Ovoot Tolgoi Sunset Field, Omnogovi Aimag, Mongolia.
- Norwest Corporation, 2009. Ovoot Tolgoi Preliminary Feasibility Study (Volumes 1, 2 & 3).
- Norwest Corporation, 2009. Technical Report of Coal Geology, Resources and Reserves Ovoot Tolgoi: A Production Property. Omnogovi Aimag, Mongolia.
- SouthGobi Energy Resources, 2009. Technical Report: Coal Geology and Resources, Ovoot Tolgoi Project, Omnogovi Aimag, Mongolia.
- Aquaterra, 2010. Ovoot Tolgoi Water Supply - Phase 1 Scoping Study Ausenco Taggart 2012 Summary Report of Coal Handling Facility.
- Aquaterra, 2012. Findings From Groundwater Exploration Works Undertaken In The Tooroin Shand Area (Estimated Exploitable Groundwater Reserves) For Supply To The Ovoot Tolgoi Mine (July 2012).
- P.E.A.T. (Aust) Pty Ltd, 2011. Qualified Person's Report on a Pre-Feasibility Coal Processing Study for South Gobi Sands.
- RungePincockMinarco (formerly MinarcoMineConsult), 2011. Technical Report of Coal Geology and Resources and Reserves, Ovoot Tolgoi Complex, Mongolia.

- RungePincockMinarco (formerly MinarcoMineConsult), 2012. NI 43-101 Technical Report of Coal Geology and Resources and Reserves, Ovoot Tolgoi Complex, Mongolia.
- RungePincockMinarco, 2016. NI 43-101 Technical Report of Resource Estimate, Coal Geology and Resources, Ovoot Tolgoi Complex, Mongolia.
- Dragon Mining Consulting Ltd. (DMCL), 2017. NI 43-101 Technical Report for the Ovoot Tolgoi Coal Mine in SouthGobi Province, Mongolia.
- Euro Asian Mines Company (EAMC), 2022. The Technical and Economic Basis of Using the Northwest Part of Nariin Sukhait Coal Deposit in the Umnugobi Province Through Open Pit Mining (translated from Mongolian to English)
- AMC Mining Consulting and Services (AMC), 2023. Clarification of the Technical and Economic Feasibility Study of the Ovoot Tolgoi Coal Deposit by Open Pit Mining, Gurvantes Sum, Umnugobi, Mongolia. (translated from Mongolian to English)

Portions of the above technical reports have been extracted by BAW after diligent inspection of such information. A full list of referenced sources used in the production of this TR is available in Section 27.

Moreover, SGS set up an online database consisting of technical reports and geological database for BAW to access information pertaining to the Coal Mine.

2.3 QUALIFIED PERSONS AND COMPETENCE

This TR is prepared by a team of BAW's mining professionals who have extensive experience in high-level technical assessment, exploration, resource definition, mine planning, production scheduling and mining operation for a wide range of commodities, including coal, in PRC, Canada, Mongolia, Kazakhstan, Philippines and other countries, and also possesses the requisite professional accreditation to qualify as "Qualified Persons" under NI 43-101 and "Competent Persons" under Australia's JORC code.

Mr. Jaydee AMMUGAUAN, as the QP responsible for the geology and resource estimation in this report, is a registered Member of the Australian Institute of Geoscientists (MAIG). Mr. Ammugauan has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and the work he has undertaken, being qualified as QP as defined by the NI 43-101 compliance requirements.

Mr. Tao XU, as the QP responsible for the reserve estimate, is a registered Professional Engineer and Geologist of the Association of Professional Engineers and Geoscientists of Alberta and Association of Professional Engineers and Geoscientists of British Columbia. Mr. Xu has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and the work he has undertaken, being qualified as QP as defined by the NI 43-101 compliance requirements.

Mr. Larry LI, as the QP responsible for coal processing, is a registered Professional Engineer of the Association of Professional Engineers and Geoscientists of British Columbia. Mr. Li has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and the work he has undertaken, being qualified as QP as defined by the NI 43-101 compliance requirements.

2.4 DISCLAIMER

This TR has been prepared solely in accordance with the specific requirements and instructions of the Client. The opinions expressed in this report have been based on the information supplied to BAW by the Client. BAW has exercised all due diligence in reviewing the information supplied. While BAW has compared the key supplied data with expected value, the accuracy and effectiveness of the results and conclusions from the reports are completely dependent on the quality of the supplied data. BAW does not take responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this Technical Report apply to the site conditions and features as they existed at the time of BAW's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to



conditions and features that may arise after the date of this TR, about which BAW had no prior knowledge nor had the opportunity to evaluate.

3. RELIANCE ON OTHER EXPERTS

In the preparation of this TR, BAW has relied on the expertise and information provided by a diverse group of specialized experts in various fields such as law, politics, environment, taxation, market analysis, and price forecast. These experts have played a vital role in ensuring the accuracy and significance of the report by contributing their expertise, particularly related to SGS's operations in Mongolia. BAW did not independently conduct field work, including drilling, to confirm the interception of coal seams for resource definition.

Those sections that have been relied on information provided by other experts are listed below.

- Section 4.2 Ownership
- Section 4.3 Environmental Liability and Permitting
- Section 4.4 Accessibility, Climate, Local Resources, Infrastructure and Physiography
- Section 6 History
- Section 19 Market Studies and
- Section 23 Adjacent Properties

BAW finds the information presented in the above sections to be generally reasonable and sees no basis to distrust or question its reliability. A list of relevant referenced sources is listed in Section 27 of this TR.



4. PROPERTY DESCRIPTION AND LOCATION

4.1 LOCATION

The Ovoot Tolgoi Coal Mine consists of the Sunrise Pit, Sunset Pit, B Field Prospect and C Field Prospect. It is situated in the southwestern area of Umnugobi Aimag, which is a province in the South Gobi region. Specifically, it is located approximately 320 kilometers (km) southwest of Dalanzadgad, the provincial capital, and 950 km south of Ulaanbaatar, the national capital. Please refer to Figure 4-1 for a visual representation of the location. The Coal Mine is near the Ceke border crossing and the Mongolian-PRC border, which are about 45 km to the north. The primary hub for delivering coal from the Coal Mine is situated in Ceke, the PRC.

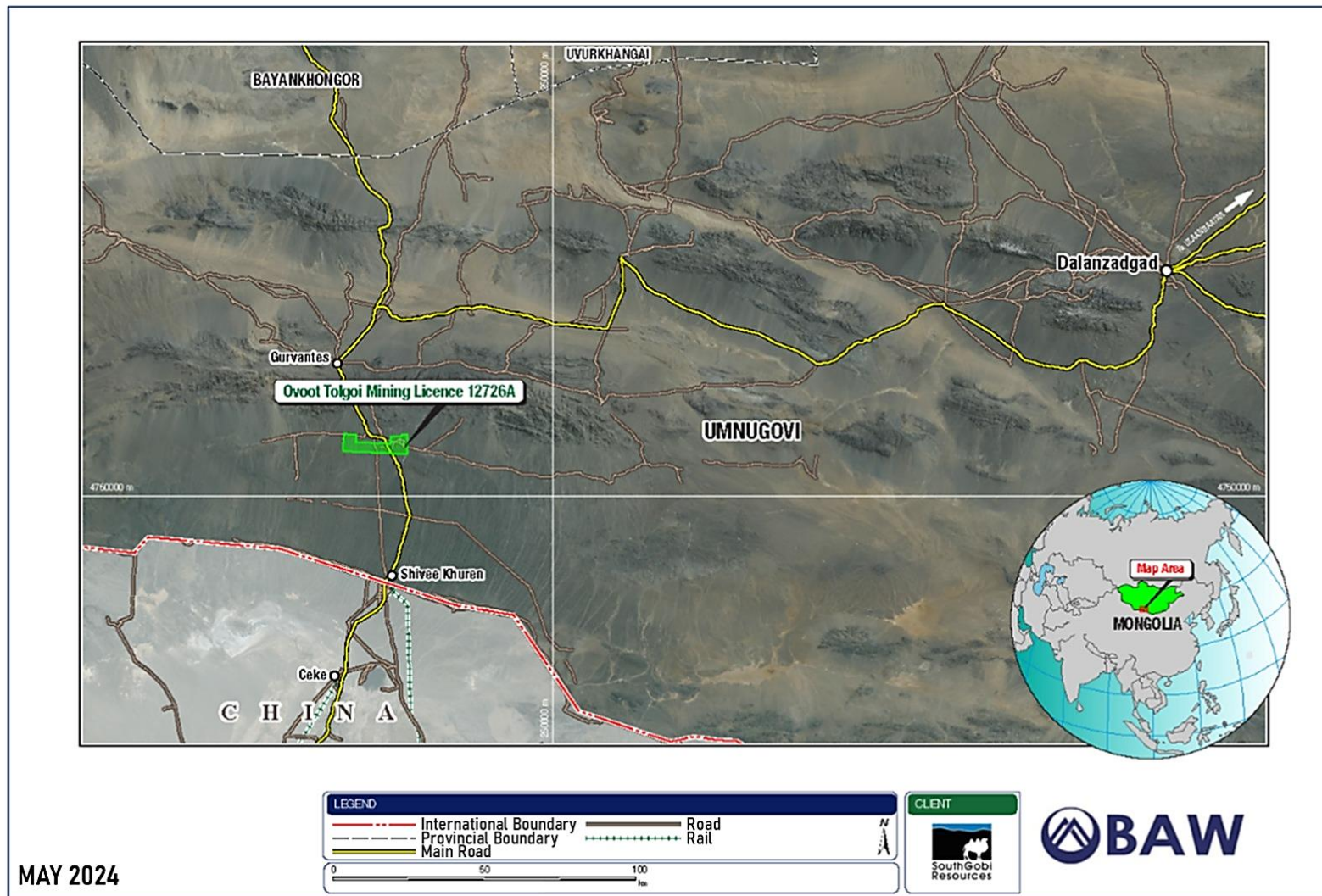


Figure 4-1. Location Map of the Coal Mine

4.2 OWNERSHIP

The initial exploration endeavors at the Ovoot Tolgoi coal exploration licenses were carried out by Ivanhoe Mines Ltd ("IVN"). In 2007, IVN transferred its coal exploration licenses, including the one for Ovoot Tolgoi, to SQR, previously known as Asia Gold Corporation ("Asia Gold"). The licenses and permits of the Coal Mine are currently held by SGS, a 100% subsidiary of SQR and a company registered in Mongolia.

According to Article 19.7 of the Mineral Laws of Mongolia, exploration permits granted by the Mongolian government have a duration of three years, with the possibility of two extensions, each lasting two years. During the exploration phase, license holders are responsible for fulfilling certain environmental protection obligations. Once a successful exploration program has been conducted, the holder of an exploration license can apply for a mining license to operate in any area covered by the license. A mining license, on the other hand, as stated in Article 26.5, is granted for a period of thirty years, with the option to renew it twice for an additional twenty years each time. The mining license includes both mineral and surface leasing rights.

On September 20, 2007, SGS was granted Mining License 12726A, which allowed them to develop an open-pit coal mine. The mining license encompasses a total land area of 9,312.27 hectares. Adjacent to SGS's concession is another mining license which is owned by Mongolyn Alt Corporation ("MAK") while the coal deposits extend across the lease boundary. SQR and MAK reached a Memorandum of Understanding, dated May 24, 2007, which covers mining activities across the lease boundary (RPM, 2011). While it is anticipated that open pits may extend beyond the lease limits in order to extract all economically viable coal within SGS's concession, the estimates of resources and reserves are limited to SGS's concession.

The Government of Mongolia approved the coordinates obtained from the survey. Coordinates of SGS's license 12726A are presented in Table 4-1.

Table 4-1. Mine License 12726A Description

<i>License No.</i>	<i>Licensee</i>	<i>Inception Date</i>	<i>Expiry Date</i>	<i>License Coordinates</i>			<i>Area (has.)</i>	<i>Mineral Interest</i>
				Vertices	Easting	Northing		
12726A	SouthGobi Sands, LLC	September 11, 2007	2037	1	101°05'6.65"	43°01'21.29"	9,312.27	100% Coal
				2	101°08'5.64"	43°01'21.29"		
				3	101°08'5.74"	42°59'59.27"		
				4	101°16'30.74"	42°59'59.24"		
				5	101°16'30.64"	43°01'21.31"		
				6	101°19'10.65"	43°01'21.31"		
				7	101°19'10.65"	43°01'41.31"		
				8	101°20'40.64"	43°01'41.31"		
				9	101°20'40.75"	42°58'16.23"		
				10	101°05'6.73"	42°58'16 .25"		

A cooperation agreement was signed between SGS and MAK on February 20, 2014. This agreement allows SGS to remove the overburden (non-coal material covering the coal deposits) from MAK's concession at SGS's own expense. This arrangement facilitates the development of SGS's pits, while MAK will be responsible for extracting the coal within the lease area. It is important to note that the coal within the pits and within MAK's concession is treated as not generating any revenue and having no associated cost. This agreement has significant implications for SGS's overall mining operation and long-term planning.

Figure 4-2 illustrates the site layout plan of the mining area. The Sunset Pit (formerly known as West field) is located southwest of MAK's concession and includes the Sunset Pit, which is part of SGS's operation. The underground resource represents the extension of the coal deposits in a downward direction. On the other hand, the Sunrise Pit (formerly named South-East field) is situated southeast of MAK's concession. The B Field Prospect is located on the northwest corner of the SGS's concession whereas the C Field Prospect is located southeast to the Sunrise Pit. It is important to clarify that all the resources mentioned in this TR are within SGS's concession only.

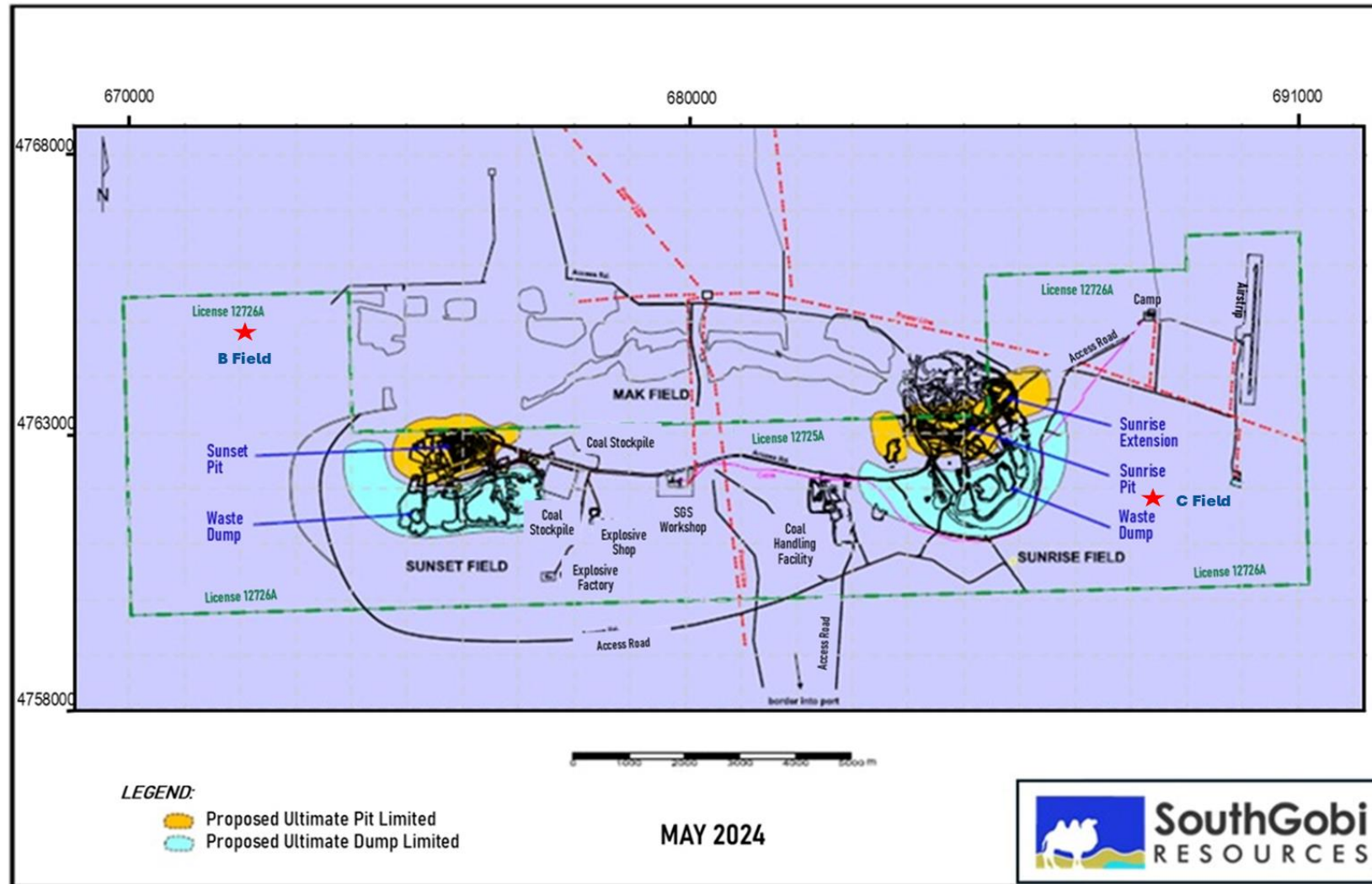


Figure 4-2. Site Layout Plan

4.3 ENVIRONMENTAL LIABILITY AND PERMITTING

The exploration, mining, and land use rights pertaining to the Ovoot Tolgoi Deposit are regulated by the Mineral Law (2006) and Land Law (2002) of Mongolia. In addition, water rights are governed by the Mongolian Water Law and Mongolian Minerals Law. These laws provide a framework for license holders to utilize the land and water resources in relation to their exploration and mining activities, while also acknowledging the discretionary authority of national, provincial, and local governments in Mongolia as granted by Mongolian law. License holders are permitted to utilize the land and water resources within the parameters set forth by these laws, while being subjected to the regulatory powers of the relevant governmental authorities.

The main environmental reports related to the Nariin Sukhait Coal Deposit Mining Project are the "*Detailed Environmental Impact Assessment for the Nariin Sukhait Coal Deposit Mining Project*" and its corresponding addendum. These reports were prepared by the Environmental Consulting Company (ENCO) in 2006. They provided a comprehensive assessment of the potential environmental impacts associated with the mining project at the Nariin Sukhait Coal Deposit. The detailed environmental impact assessment report, along with its addendum, delves into various aspects such as air quality, water resources, biodiversity, and other relevant environmental factors. These reports serve as important references for evaluating and mitigating the environmental impacts of the Nariin Sukhait Coal Deposit Mining Project.

Presented below is a summary of the initial environmental obligations related to exploration and mining activities, which include but are not limited to the following points:

a) Exploration Environmental Obligations:

- Exploration and mining permit holders must submit an Environmental Protection Plan (EPP) for exploration operations to the Provincial Department of Environmental and Tourism for approval, following the approval of the Exploration Plan by the Mineral Resources and Petroleum Authority of Mongolia (MRPAM).

- The EPP should include an assessment of environmental effects and mitigation measures, as well as the implementation of protective measures.
- Once the EPP is approved by the Provincial Department of Environmental and Tourism, exploration permit holders should submit it to Soum Governor office and deposit 50% of the EPP budget into the applicable Soum Bank Account as a guarantee. This amount is refunded if the exploration permit holders fulfill all environmental obligations stated in the EPP, including site rehabilitation.

b) Mining Environmental Obligations:

- Before commencing mining activities, the company is required to conduct a Detailed Environmental Impact Assessment ("DEIA") in accordance with Mongolia's Environmental Impact Assessment ("EIA") law. The DEIA should assess the impacts of mining activities, including mitigation measures, and outline their implementation.
- Annually, within the first month, the company must deposit 50% of the annual environmental protection budget into the MNET Bank Account.
- The Soum Governor has the authority to suspend mining operations if the company fails to comply with the specified conditions. Additionally, if the company fails to meet its environmental obligations for the year, the Soum Governor and Provincial Department of Environmental and Tourism inspectors can halt mining activities for the following year.

These obligations are outlined in Article 38 (exploration activities) and Article 39 (mining activities) of the Minerals Law. The issue of mine closure is addressed in Article 45 of the Minerals Law.

4.4 SURFACE RIGHTS

SGS holds the rights to both surface and subsurface coal resources that are currently mined and those intended for future development.

4.5 WATER RIGHTS

SGS has authorized water licenses that cover water diversion and usage. The water usage rights held are sufficient to support the LOM plan.

4.6 ROYALTIES AND ENCUMBRANCES

4.6.1 Royalty

According to the Mongolian royalty legislation, there are certain provisions in place. Initially, there is a base royalty rate of 5% applied to all export coal sales. Additionally, starting from January 1, 2011, SGS is subject to an additional sliding scale royalty, which can range up to 5%. The calculation of this royalty is based on a reference price per tonne, which is published monthly by the Ministry of Finance of Mongolia.

However, it is important to note that since July 1, 2021, the royalty computation methodology has been updated to solely rely on the reference price published by the Ministry of Finance of Mongolia while removing all other factors that were previously considered in the computation.

4.6.2 Property Tax

According to Resolution No. 4/5 of the meeting of citizens' representatives of Umnugobi province on December 2, 2021, the Immovable Property Tax in Mongolia was increased from 1% to 2% of the purchase value.

4.6.3 Mining License Fee

A fee of Mongolian Tugriks ("MNT") 7,250 per hectare is payable annually for the Coal Mine's mining license. Given that the total area of the mining license is 9,282.76 hectares, the annual fee payable by SGS is MNT 67.3 million.

4.6.4 Value Added Tax (VAT)

The VAT is 10% on capital, materials and supplies and also on local sales. VAT is assumed to be refunded once SGS's coal is incorporated in the final mining product list.

4.6.5 Air Pollution Fee

An air pollution fee of MNT1,000 is paid per tonne of ROM coal.

4.6.6 Land Fee

In 2023, the land fee increased to MNT 42 per square meter ("m²") from MNT 16/m² for mining area depending on usage of the land. For electric lines, the fee is MNT 7,500 per kilometer.

4.6.7 Income Tax

Starting from January 1, 2020, the applicable tax rates for corporate income are 1.) For the first six billion MNT of net profit before tax, a tax rate of 10% is applied and 2). For the net profit before tax exceeding six billion MNT, a higher tax rate of 25% is imposed.

4.7 COMMENT ON SECTION 4

The QP asserts that there are no other significant environmental, legal, title, taxation, socio-economic, marketing, political, or any other relevant factors known to him that would materially impact the operation of the Coal Mine beyond what has been discussed in the TR.

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 LOCATION

The Coal Mine is located in south-central Mongolia, approximately 45 km north of the Mongolia-China border. The Coal Mine is within the administrative territory of Gurbantoukai, Umnugobi Aimag (South Gobi Province) as shown in Figure 4-1.

The population of Umnugobi Aimag is sparse with less than one person per square kilometer ("km²"). Population centers and transportation infrastructure are in proximity to the Coal Mine.

5.2 CLIMATE AND PHYSIOGRAPHY

The region has a continental desert climate characterized by winter temperatures ranging from 0°C to -30°C and summer temperatures ranging from 30°C to 35°C. The average rainfall is 133 millimeters (mm), typically falling between 100 mm and 200 mm, with most of the precipitation (70%-80%) occurring in July and August. Strong winds are common during the spring season. The weather conditions are favorable for exploration activities from mid-March to October, providing a pleasant climate. Additionally, the climate permits mining operations to occur year-round.

The Umnugobi Aimag is within the physiographic region of the Gobi Desert. The topography of the deposit varies from flat, gravel-covered desert plains to moderately hilly terrain. Surface elevation ranges from 1,515 to 1,555 meters (m) above sea level. In the north of the deposit, there are large mountains such as Khurenkhanang ridge and Khogshoo mountain, Tost ridge (2517m), Tahilgy ridge (2316m), Erdenii ridge and Khogshin ridge in the central part, with a relative height ranging from 150 to 300 m. These mountains are cut by steep and deep canyons, creating a complex relief.

Water regime in the region is highly variable and subject to fluctuations depending on the climate and rainfall patterns during a given year and season. As a result, water sources, such as

creeks and rivers, can dry up during periods of low rainfall. Conversely, during times of heavy snowfall or continuous rains, these creeks can transform into fast-flowing rivers. The presence of numerous dry ridges of varying shapes and lengths is a characteristic feature of the area.

Vegetation in the area is sparse, mainly comprising small shrubs and grasses. The current economy in the region relies on a traditional subsistence model, primarily centered around raising sheep, goats, and camels.

5.3 ACCESSIBILITY AND INFRASTRUCTURE

Regular scheduled air service is available between Ulaanbaatar and Dalanzadgad, offering a convenient transportation option for travelers. The travel time from Dalanzadgad to the Coal Mine typically takes around seven hours and involves a combination of paved and unpaved roads.

In September 2006, SGS acquired the required permit to establish an on-site airport at the Coal Mine. The construction of the airport was subsequently completed in 2007, providing convenient access to the site. Prior to the establishment of the on-site airport, weekly chartered aircraft services from Ulaanbaatar were utilized for crew rotations and transportation of essential supplies. However, our understanding indicates that the chartered aircraft service has been suspended since 2020. As an alternative, land transportation is now employed to transport personnel and supplies to the Coal Mine.

The two main sources of mining labor for SGS are Ulaanbaatar and the local Soum. At present, around 60% of SGS employees are recruited locally. The remaining employees are transported to and from Ulaanbaatar by land. The work schedule typically follows a two-week on and two-week off rotation for the employees.

A rail line connects the Ovoot Tolgoi area with the interior of the PRC. The railroad terminal is situated at Ceke, approximately 45 km south of the Coal Mine. In 2010, a two-lane paved road was constructed from the mine site to Ceke, which is being used by coal trucks.

Electrical power for the camp and shop complexes was initially supplied by diesel generators. The camp and shop complexes are now connected to a powerline that runs from the PRC to Gurvantes Soum, supplying electrical power to the area (Figure 4-2).

There is no immediate availability of surface water in the vicinity of the Coal Mine. To meet the camp's water requirements, water supply wells have been drilled in the area. Moreover, water for dust suppression purposes is sourced from the pit dewatering system. In 2012, SGS commissioned Aquaterra to conduct a hydrogeological survey, which identified a water source located approximately 30 km away from the mine site. The survey findings determined that the groundwater from this source was suitable for industrial use and capable of supporting consistent coal washing operations in a wet coal processing plant. Consequently, SGS obtained a water permit that authorized the use of this water source for their operations. This comprehensive approach to water management highlights SGS's dedication to ensuring a sufficient and sustainable water supply for the camp's needs, as well as supporting essential industrial processes such as coal washing.

Waste disposal areas have been identified and approved in the mining permit.

On September 20, 2007, SGS was granted a mining license for the purpose of developing surface coal mining activities at Ovoot Tolgoi. Subsequently, in April 2008, the mine commenced its operations at the Sunset Pit following the approval of a mining permit by the Mongolian Government. This milestone allowed SGS to initiate coal extraction and production activities at Ovoot Tolgoi, marking the official start of mining operations in accordance with the necessary regulatory approvals.

5.4 COMMENT ON SECTION 5

In the Opinion of the QP:

- The existing local infrastructure is robust and fully operational. This includes transportation routes and systems for the efficient movement of goods to and from the project area. Additionally, the QP acknowledges the presence of a capable and available

workforce, ensuring that the necessary expertise is accessible to effectively carry out mining operations.

- There are sufficient surface rights to support the mine plan (refer to discussion in Section 4.2).
- The existing mineral lease encompasses a significant area that is adequate for accommodating the infrastructure necessary to support ongoing mining operations. Furthermore, the area within the mineral lease is also sufficient to fulfill potential future infrastructure requirements that may be necessary for future mining operations.

6. HISTORY

V.S. Volkhonina carried out the first geological investigation in the Nariin Sukhait area in 1951 and 1952, including a geological mapping at a scale of 1:500,000.

A Mongolian exploration survey led by D. Dashtseren in 1971 identified the first coal occurrence in the Nariin Sukhait area.

Exploration Unit No.15 of Ulaanbaatar Geological Research Group subsequently conducted a further study of the Nariin Sukhait coal deposit in 1991, including field mapping, trenching, 34 boreholes, coal quality testing, and resource estimation for the two most promising resource areas, which are now controlled by MAK and located outside the property owned by SGS. A total Inferred Resource of 125,519,000 tons to the +1,450m level, corresponding to 75 to 90m depth, were reported based on standards of the former Soviet Union.

SGS disregarded the historical estimate due to its non-compliance with the NI 43-101 standard and the boundaries of the coal resource were not clearly defined. SGS independently carried out exploration, geological modeling, and resource estimation, excluding any previous Nariin Sukhait exploration work. SGS had no intention of upgrading the historical estimate to meet the NI 43-101 standard.

The Russian resource classification system and the NI 43-101 categories are not directly comparable, which means that the current NI 43-101 resource estimates cannot be directly compared to the Russian classification system. NI 43-101 criteria applied to coal deposits for the purpose of determining the coal resources and reserves include both "Geology Type" and "Deposit Type". This classification of a coal deposit into a specific type helps establish the range-limiting criteria that can be applied during the estimation of resources and reserves.

The Mongolian State Geological Centre has documented the history of the deposit in a public report which is accessible to the public (Dashkhoral, et al., 1992). This study defined the seam nomenclature currently employed at Nariin Sukhait.

Norwest conducted comprehensive studies of the deposit areas which were based on their management of exploration programs carried out between 2005 until 2009. In addition, they conducted mine planning studies up until 2009 in the Coal Mine, which provided updated information and insights for the deposit area. MBGS supervised exploration work in 2010. SGS supervised all subsequent exploration work from 2011 up to the time of this TR preparation.

RPM completed multiple NI 43-101 technical reports for the Coal Mine in March 2011, March 2012, and May 2016 and a technical review of the mine plan in April 2016.

In 2011, RPM declared a surface (<300m) Measured Resource of 81.82 Mt, Indicated Resource of 15.88 Mt and Inferred Resource of 1.88 Mt for the Sunset and Measured Resource of 54.45 Mt, Indicated Resource of 19.92 Mt and Inferred Resources of 11.04 Mt for Sunrise. Underground (300-600m) Measured Resource of 46.58 Mt, Indicated Resource of 20.89 Mt and Inferred Resource of 13.35 Mt for Sunset and Measured Resource of 5.42 Mt, Indicated Resource of 21.21 Mt and Inferred Resource of 70.80Mt for Sunrise were also calculated. Concurrently, Proven Reserve of 35.30 Mt and Probable Reserve of 35.30 Mt for Sunset and Proven Reserve of 27.50 Mt and Probable Reserve of 8.70 Mt for Sunrise were issued by RPM.

In 2012, RPM declared a surface (<300m) Measured Resource of 57.8 Mt, Indicated Resource of 35.50 Mt and Inferred Resource of 15.00 Mt for the Sunset and Measured Resource of 75.50 Mt, Indicated Resource of 24.40 Mt and Inferred Resource of 9.00 Mt for Sunrise. Underground (300-600m) Measured Resource of 51.20 Mt, Indicated Resource of 20.40 Mt and Inferred Resource of 25.00 Mt for Sunset and Measured Resource of 14.60 Mt, Indicated Resource of 22.90 Mt and Inferred Resource of 37.00 Mt for Sunrise were also calculated. Concurrently, Proven Reserve of 47.60 Mt and Probable Reserve of 31.40 Mt for Sunset and Proven Reserve of 71.50 Mt and Probable Reserve of 25.10 Mt for Sunrise were issued by RPM.

The total Resources for the Ovoot Tolgoi Deposit have undergone significant changes in 2016 compared to the previous estimate conducted in 2012. The changes are attributed to the reclassification and exclusion of certain resource categories based on their economic viability and data availability. No Reserves were declared in 2016 Technical Report. The key findings are listed below.

- **Underground Resources:** The underground Resources, which were previously included in the estimate, have been excluded in the current assessment. These resources are now considered to lack reasonable prospects for eventual economic extraction due to falling coal prices. Consequently, their quantity is no longer accounted for in the updated Total Resources estimate.
- **Surface Resources:** The total Resources for the deposit have increased for surface Resources. This can be attributed to small improvements in the geological model and an increase in the maximum depth considered for Surface Resource which was expanded from 300 to 350 meters.
- **Reclassification of Resources:** The reclassification of resources due to changes in Geology Type from Complex to Severe has resulted in changes to the distribution across different resource categories. Notably, there is no Measured Resource in the 2016 Technical Report. Indicated Resource now total 170 Mt, compared to 193.20 Mt (Measured+Indicated) in the 2012 estimate. Inferred Resource in the 2016 estimate is 78.00 Mt compared to 24.00 Mt in 2012.

DMCL completed a NI 43-101 Technical Report for the Coal Mine in May 2017. The resource and reserve estimate presented is materially different from the previous estimate made by RPM in the 2016 Technical Report due to the reasons listed below by DMCL.

- The Geology Type classification has been upgraded from previously "Severe" to "Complex" which led to a different requirement of spatial distribution of geological data and thus resource categorization according to GSC Paper 88-21 ("GSC 88-21"). Resource categories are re-classified accordingly, resulting in the regain of the Measured Resource in the overall SGS resource portfolio.
- Surface Resources are more conservatively constrained to the depth of 300m from the ground surface, compared to the depth of 350m used in the 2016 Technical Report. The surface Resource (Measured and Indicated) calculated by DMCL is 194.51 Mt compared to 170.00 Mt in 2016 Technical Report.
- A more conservative approach is adopted, compared to the 2012 Technical Report, such that only underground Resources constrained to the depth 500m is considered to be of reasonable prospects for eventual economic extraction. Underground Resources have been re-established due to recovering coal market conditions in the PRC and SGS's

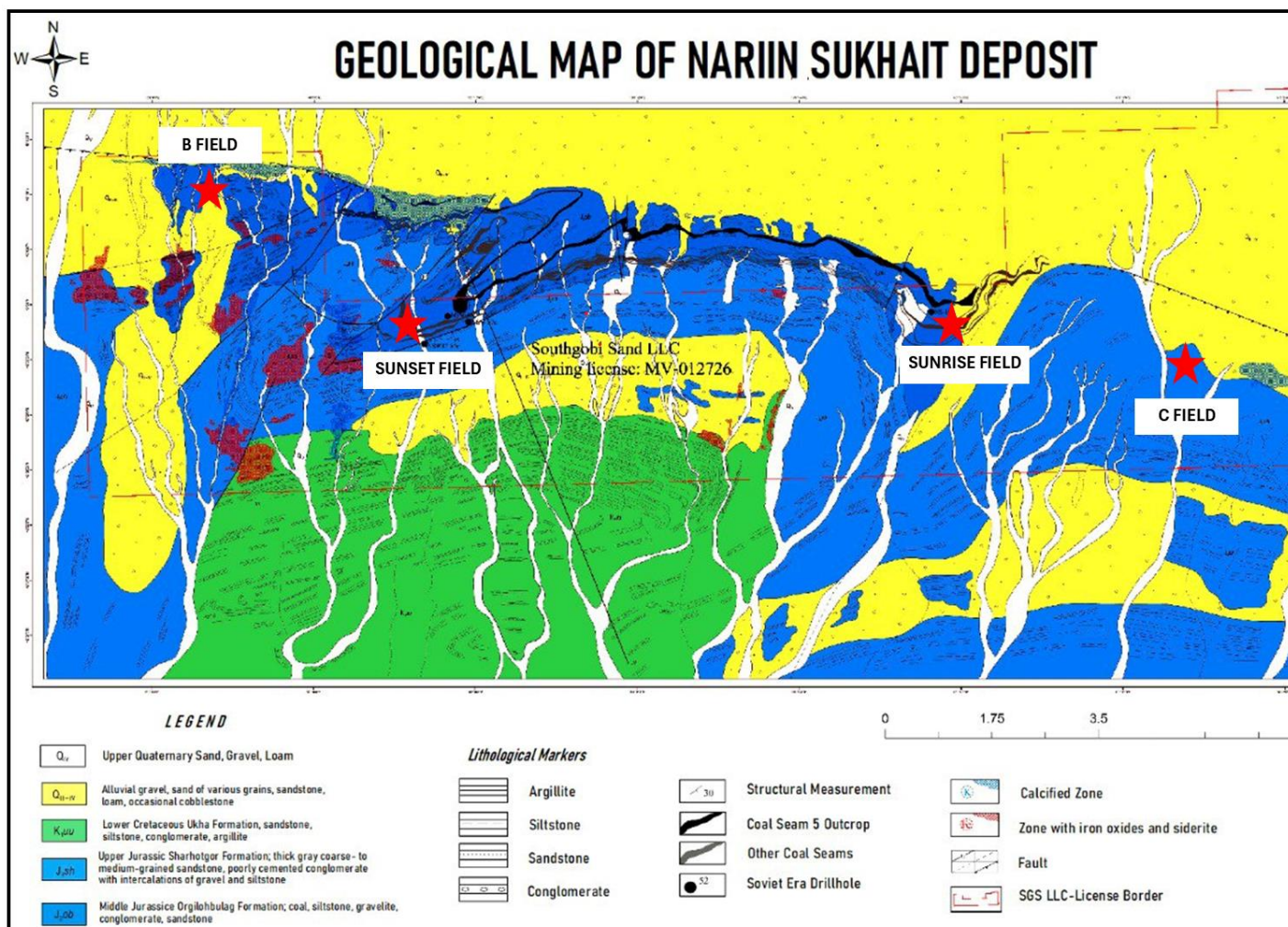
long-term plan of fire-power plant near to the mine site which will require a substantial supply of thermal coal nearby. DMCL calculated underground Resource (Measured and Indicated) of 107.69 Mt compared to none in 2016 Technical Report.

- Proven Reserve of 99.49 Mt and Probable Reserve of 14.68 Mt was also declared for the Coal Mine compared to none in 2016 Technical Report.

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The South Gobi region of Mongolia has a geological history which is characterized by the collision of continental plates and subsequent crustal extension, similar to the Basin-and-Range style crustal extension. The region is primarily composed of elongated mountain ranges that trend in an east-west direction. These mountain ranges consist of crystalline basement rocks, which are dominant and are affected by faults with intermediate to high angles. These faults indicate both compressional and extensional movements. Intervening basins are present between the mountain ranges. The mountain ranges and basins in the South Gobi region also contain sedimentary sequences that range from the Late Cretaceous to Permian ages. These sedimentary sequences are overlain by unconsolidated sediments of the Quaternary age.



illustrates the geological characteristics of the Nariin Sukhait Coal Deposit.

The Coal Mine, situated in the Nariin Sukhait region, is one of the active coal mines in the area. It consists of two main pits: the Sunset Pit to the west and the Sunrise Pit to the east. The primary geological feature closely associated with the Ovoot Tolgoi Deposit is the Nariin Sukhait fault. This fault has a curved shape and runs in an east-west direction with a moderate dip. It extends latitudinally along the edge of the Ovoot region, with Middle Jurassic coal-bearing sedimentary rocks on its southern flank and Quaternary sediments on its northern flank.

Coal-bearing sedimentary rocks, such as conglomerates and sandstones, can be found within the southern portion of the fault. On the other hand, the northern part of the area has experienced the deposition of Quaternary sediments. The coal deposits are distributed along the southern side of the fault. Moving eastward from the southern side of Nariin Sukhait, there are several rifts that extend towards the north and northwest. These rifts act as divisions, creating multiple smaller blocks within the area of sedimentary rocks that contain coal. The sedimentary rocks in the area have a northward dip of approximately 45° to 60°. The presence of shallow folds suggests movement and deformation caused by tectonic forces. Furthermore, the Nariin Sukhait fault exposes Late Permian coal-bearing sequences.

The Upper Cretaceous terrigenous formations are believed to have formed due to tectonic compression, while the Quaternary sediments are associated with fault zones. The structure at the historical drilling site is characterized by a simple monoclinal structure, and the coal seams dip at angles ranging from 12° to 83° from north to south.

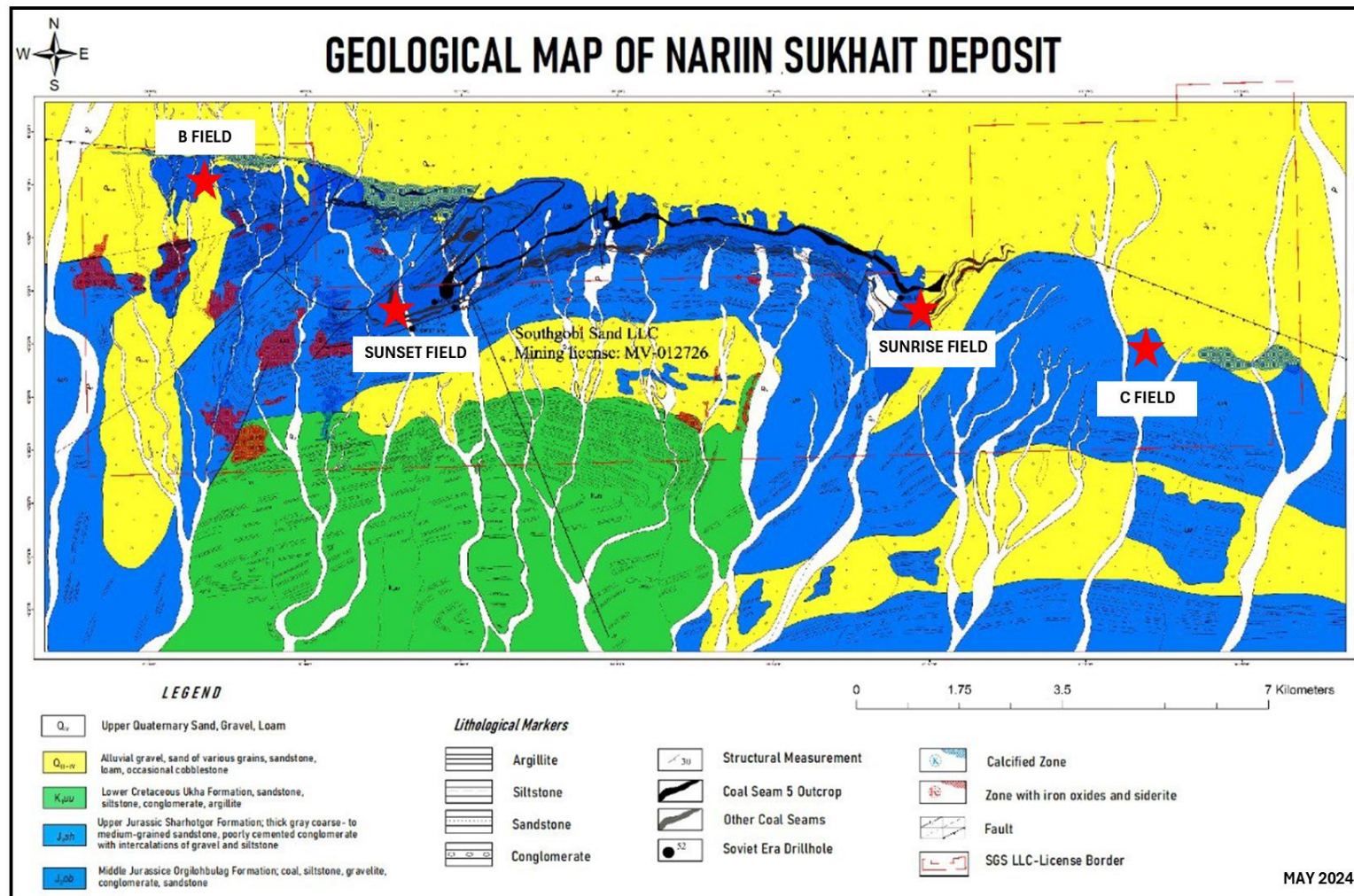
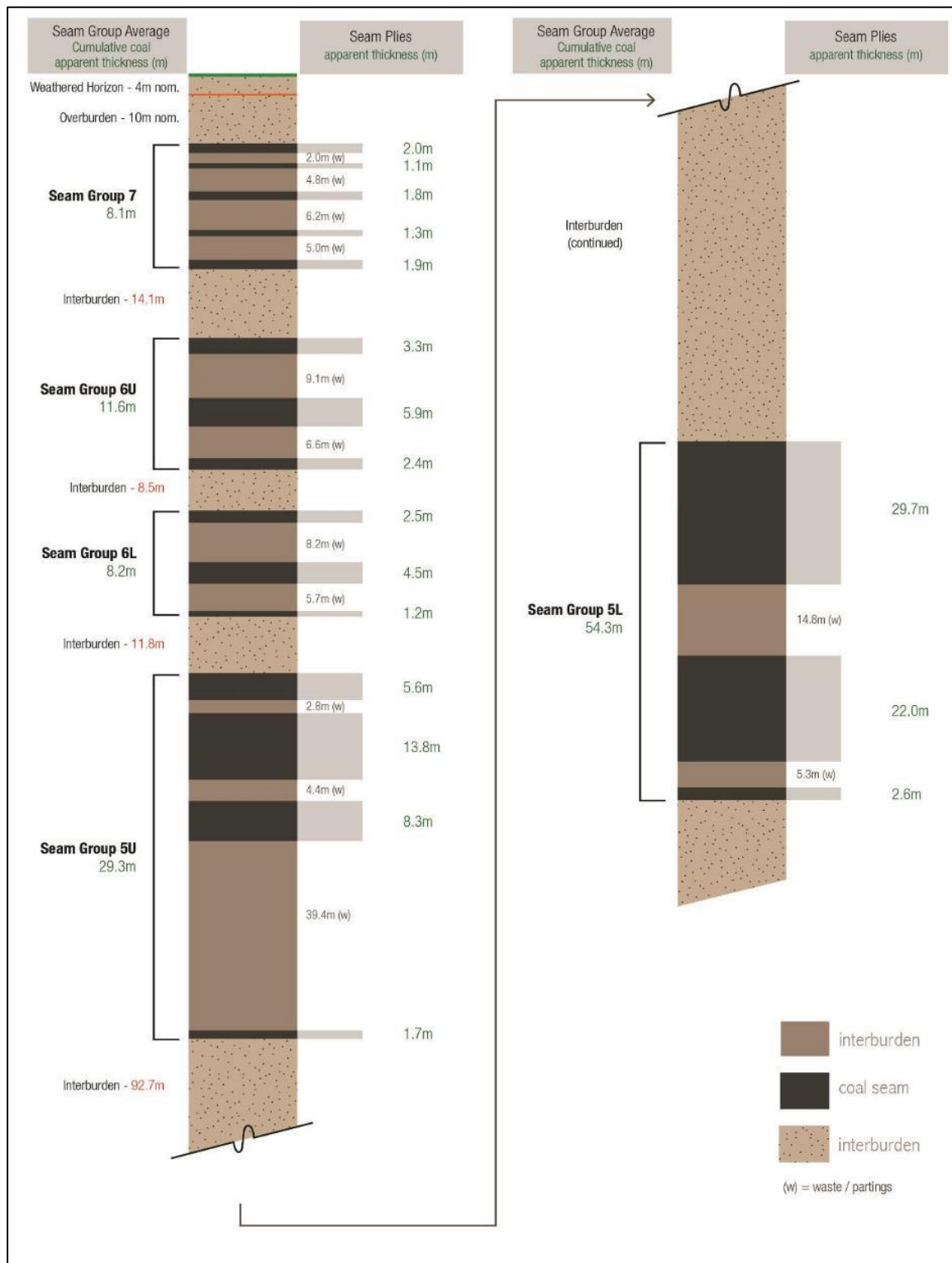


Figure 7-1. Geological Map of the Nariin Sukhait, which illustrates the geological characteristics of the Nariin Sukhait Coal Deposit.

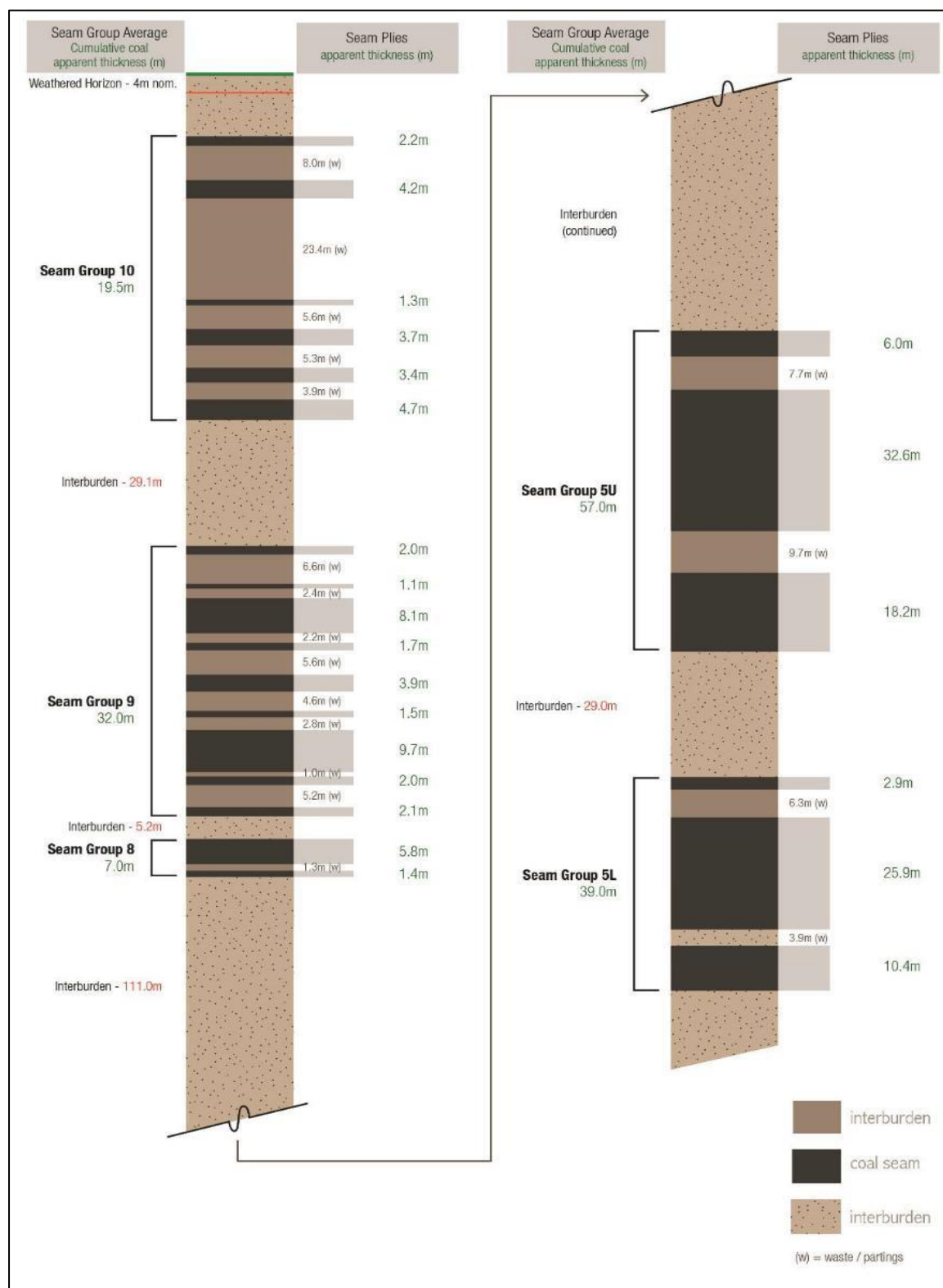
7.2 COAL-BEARING SEQUENCES

The initial geological exploration activities in the Nariin Sukhait region took place in 1991, conducted by Exploration Unit No. 15 of Ulaanbaatar Geological Research Group. Additionally, the Mongolian State Geological Center conducted exploration and reported the existence of ten (10) coal seams (Dashkhorol, Baatar, Dashdondov, & Orgil, 1992). The estimated overall thickness of the coal-bearing sedimentary sequence in the region is 1,370 m. Within this sequence, the cumulative thickness of the coal ranges from 68 meters to 250 m, with the majority occurring in Seam No. 5. The interburden, which refers to the material between the coal seams, consists mainly of sandstones and conglomerates. Inside the coal seams, the partings are primarily composed of mudstones and carbonaceous mudstones.

Based on the existing geological knowledge of the deposit, Seam Groups such as Seam Nos. 4, 5L, 5U, 6, 7, 8, 9, 10, and 11 have been identified. Each Seam Group is subdivided into multiple layers, also referred to as plies, based on the presence of parting material within the Seam Groups. The seams within the deposit are typically thick and have steep dips, although the geological characteristics vary significantly throughout the deposit.



and



present the general stratigraphy of the Sunrise and Sunset fields respectively, based on the average apparent thickness derived from drillhole data. However, it is crucial to acknowledge that the geology exhibits high variability, and the generalized stratigraphic columns represent

average values from intersected drillholes. They may not accurately represent all areas of the deposit since drillholes often do not intersect all Seam Groups.

Seam Nos. 5L and 5U, which are found in the Sunset and Sunrise Pits, provide most of the coal resources used in the coal mine. Seam Nos. 6 and 7 in the Sunrise Pit are found to be potentially related to Seam Group No. 8, 9 and 10 in the Sunset Pit. The existence of Seam 4 was also revealed through exploration efforts in area B of the Nariin Sukhait coal deposit.

In the Sunset Pit, the remainder of the coal resource is identified in Seam Nos. 4, 8, 9, 10 and 11, containing multiple discrete seams. Meanwhile, the Seam Nos. 1, 2 and 3 in the Sunrise Pit described in the early exploration activities at Nariin Sukhait have not been identified in SGS's concession.

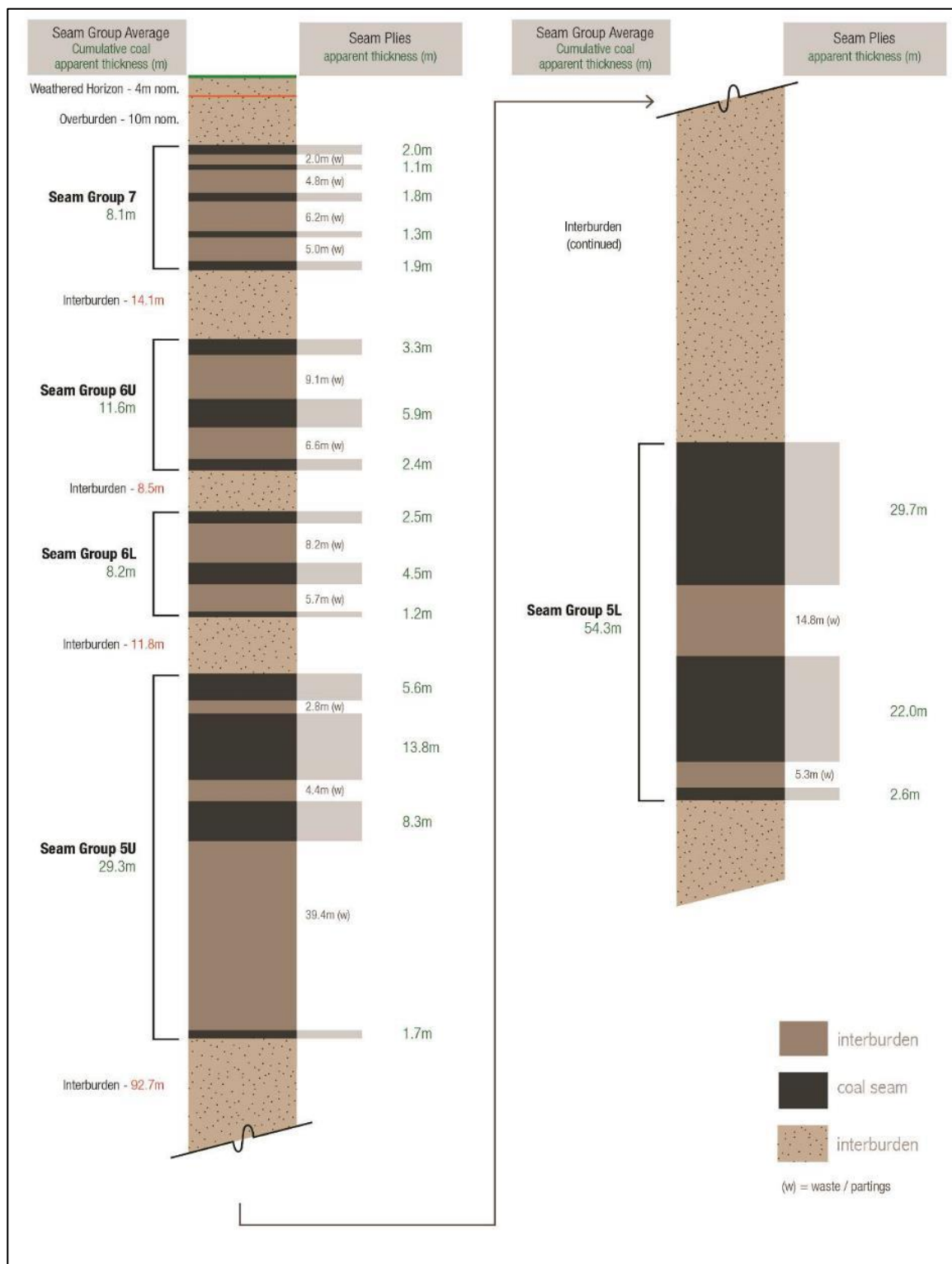


Figure 7-2. Simplified Stratigraphy of the Sunrise Pit (RPM, 2016)

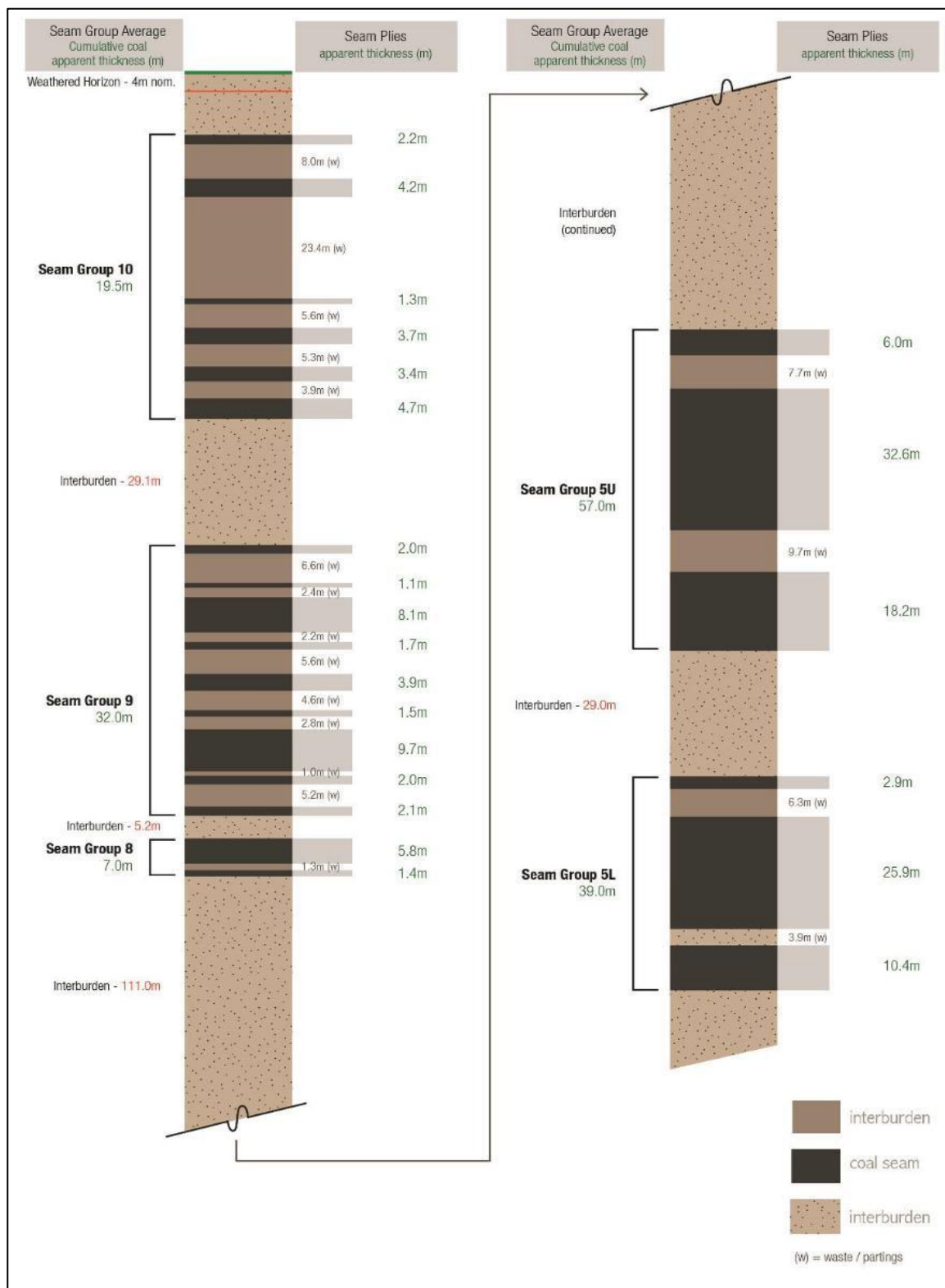


Figure 7-3. Simplified Stratigraphy of the Sunset Pit (RPM, 2016)

7.3 STRUCTURAL GEOLOGY

The structural geology of the Ovoot Tolgoi deposit is considered to be highly complex. There are significant variations in the thickness of coal seam groups, individual plies, and interburden units. These thickness variations are attributed to structural deformations within the stratigraphic layers. The primary mechanisms responsible for these deformations are interpreted to be extensive shearing within the coal seams, leading to coal "stacking" and "wants", as well as thrust faulting, which results in the repetition of the stratigraphic sequence (RPM, 2016).

Extensive structural deformation was observed in the current workings of the Ovoot Tolgoi deposit during site visits conducted by various QPs. This deformation is evident through various indicators, including the presence of slickensided surfaces and sheared foliation within coal units. Additionally, apparent isoclinal folding, fault and shear discontinuities, and angular disconformities associated with faulting were also observed. These observations highlight the substantial influence of structural deformation on the geological characteristics of the deposit.

7.3.1 Sunrise Pit

The Sunrise Pit is located in the southeastern part of the mining license of MAK. The stratigraphy in the Sunrise Pit has a steep dip, with an average range of 30° to 50°. The stratigraphy in the eastern part of the field dips towards the southeast, while in the central portion, it dips towards the south. In the western part of the field, the stratigraphy dips towards the west, creating a half dome shape. These dip directions reflect the general tilting and curving of the rock layers in their respective areas.

The coal-bearing section in this area dips towards the southeast at an average angle of approximately 35°. Within this section, Seam No. 4 is positioned below Seam No. 5, while Minor Seams Nos. 6 and 7 are situated above Seam No. 5. Although a direct correlation has not been definitively established, it is probable that Seam Nos. 6 and 7 are equivalent to Seam Nos. 8, 9, and 10 in the Sunset Pit.

Seam No. 5 is of particular importance as it contributes significantly to the estimated coal resources within the Sunrise Pit. Currently, mining operations by MAK are focused on extracting coal from Seam No. 5.



Figure 7-4 illustrates that the mining activity in this area follows the axis of a regional scale antiform, a geological structure that extends southwest from MAK's East Pit. This antiform serves as the foundation for the calculated resources at the Sunrise Pit as determined by the SGS.

The Sunrise Extension area exhibits a high level of structural deformation, which has proven to be quite complex. In 2015, RPM conducted a geological review incorporating exploration drilling results from 2014 in an attempt to enhance the understanding of the geology of the area. The stratigraphy is believed to have a steep southeast dip. However, the correlation of coal units in the drillholes within the Sunrise Extension area has presented difficulties. Additionally, there are swift variations in the thickness of coal units that are difficult to comprehend without considering the presence of complex fault systems. These fault systems would play a role in the displacement and distortion of the coal units, leading to the observed irregularities in thickness. It should be noted that the current dataset does not provide strong support for the existence of

such fault systems. The area is considered to have undergone significant structural deformation that cannot be fully characterized at this stage. Nevertheless, the estimation of coal volumes and qualities primarily relies on the extent and distribution of drilling data available.



Figure 7-4. Coal Seam Exposure in the Sunrise Pit (February 2024)

7.3.2 Sunset Pit

The Sunset Pit is positioned in the southwestern section of MAK's mining license. Within this area, the coal resources are found on a monocline that dips towards the southeast. This monocline stretches from the northwest exposure of the Sunset Pit to the MAK pit. It is possible that the southeast-dipping monocline observed represents a preserved limb of a larger geological structure, specifically a southwest-plunging antiform. This antiform extends in a northeast-southwest direction, with its origin located at the northwest exposure of the Sunset Pit (refer to

Figure 7-5). The presence of the southeast-dipping monocline suggests a folding pattern that aligns with the larger antiform structure, indicating a regional-scale deformation in the area.

The Sunset Pit is divided into two distinct resource blocks: the southern block and the northern block. These blocks are separated by a thrust fault system that plays a crucial role in controlling the distribution of coal within the pit. This interpretation was proposed by Norwest. In the southern block, the rocks have a steeper dip and have undergone movement over the northern block. The northern block contains a repetition of the upper seams, specifically Seam Nos. 8, 9, and 10.

In 2010, additional drilling activities took place, leading to a re-correlation of the seams by MGBS. This re-correlation identified the fault repeat of the upper seams as Seam No. 5. Based on the interpretation of existing data, there is a complex fault zone in the Sunset Extension area, extending in a northeast-southwest direction from the northwest exposure of the Sunset pit to the MAK pit. However, the precise location of the fault zone in a southwest direction remains uncertain due to insufficient drilling (RPM, 2016). Further exploration and drilling efforts are required to obtain more data and clarify the southwest extent of the fault zone. It is important to note that the geological model developed by MBGS in 2010 and 2011 did not incorporate the presence of faults in their interpretation because it is believed that including faulting would not significantly enhance the confidence and reliability of the geological model at this stage. The exact positioning of seams within the fault zone requires ongoing monitoring through in-pit mapping and geotechnical studies, and these observations need to be regularly updated on a short-term basis. These findings highlight the complex geological nature of the Sunset Pit, with faulting playing a significant role in the distribution and repetition of coal seams.

The dip angles and distribution of coal seams in the Sunset Pit vary depending on their location. In the northern part of Sunset, the seams dip at an approximate angle of 20° towards the southeast. However, as you move south of Sunset, the dip angle increases to about 45°. In the western part of the pit, the seams dip towards the southwest. Additionally, in the eastern part of the Sunset Field, the stratigraphy generally exhibits a south-southeast dip, ranging from 40° to 60° (RPM, 2016). It is important to note that the Sunset Extended area shows more variation in terms of seam dip and dip direction compared to the eastern portion of the Sunset Field. The

variations in dip angles and the distribution of coal seams within the Sunset Pit highlight the geological complexity of the area. Understanding these factors is crucial for efficient coal extraction and accurate estimation of coal resources within the pit.

The majority of the coal resources within the southeast-dipping coal-bearing sequence is found in Seam Nos. 5L and 5U. These coal seams likely contain significant coal deposits that can be economically extracted. Additionally, a significant portion of the coal resources in the Sunset Pit is located in the upper seams, specifically Seam Nos. 8, 9, and 10.



Figure 7-5. Coal Seam Exposure in the Sunset Pit (February 2024)

7.3.3 B Field Prospect

Mining has not commenced in the B Field Prospect. However, another Mongolian mining company called Usukh Zoos is actively mining along the northwestern border of SGS's

concession that encompasses the B Field Prospect. Examination of the pit exposure reveals the presence of tight folding and faulting, with minimal displacement apparent in the coal seams. A similar observation was made during the assessment of core photos and the limited remaining core holes in the field.

After analyzing core photos and interpreting coal seam continuity, it has been observed that different coal seams within the area exhibit varying inclinations, ranging from 12° to as steep as 83°. The SGS resource geology team initially identified upper coal Seam Nos. 10, 9, 8, 7, and 6, as well as lower Seam Nos. 4, 3, 2, and 1. Measurements taken from intercepted coal seams indicate that the lower Seam Nos. 4, 3, 2, and 1 dip from 12° to 58° to the south and seem unaffected by faulting. In contrast, the upper Seam Nos. 10, 9, 8, 7, and 6 dip from 20° to 83° to the south and show moderate deformation due to faulting events.

According to the initial interpretation by SGS's resource team, there were lower Seam Nos. 4, 3, 2 and 1 and upper Seam Nos. 10, 9, 8, 7, and 6. However, the subsequent stratigraphic interpretation by EAMC in 2022 suggests that the lower coal seams are equivalent to the upper coal seams on the opposite side of an interpreted fault. Therefore, Seam 4 corresponds to Seam 10, Seam 3 corresponds to Seam 9, Seam 2 corresponds to Seam 8, and Seam 1 corresponds to Seam 7. BAW concurs with this interpretation as it aligns better with the geological context, considering the adjacent stratigraphic sequence of the Coal Mine. Importantly, such revised seam numbering has minimal impact on the overall resources and the future extraction of these resources.

7.3.4 C Field Prospect

The C Field Prospect represents another prospect located southeast of the Sunrise Pit . It is currently in the early stage of exploration. More drilling is required in order to establish with a proper structural understanding and hence resource estimation in the future.

7.4 COAL SEAMS

The primary concentration of coal in the Sunset Pit is situated in an exposed area of upper Permian sediments, specifically within the hanging wall of the Nariin Sukhait Fault. Dashkhoral, et al. (1992) introduced the naming system for the seams in earlier studies, assigning ascending order labels to the upper seams. Seam No. 5, positioned in the middle of the sequence and known for its significant thickness, was designated as the thickest seam. Subsequent exploration activities led to the discovery of additional splits and seams within the previously identified coal packages.

The thickness of each seam group, based on apparent thickness derived from drill intercepts, is presented in the tables below. Additional data can be found **Error! Reference source not found.** 7-1, Table 7-2 and Table 7-3. Moreover, Table 7-4 and 7-5 present the nomenclature used in the Sunset and Sunrise Pits, respectively.



Figure 7-6. Photo of Usukh Zoos mining operation (looking south) showing the edge of B field on the right side



Figure 7-7. Remnants of core drilled from NSB16-08C

Table 7-1. Coal Seam Thickness of the Sunset Pit (RPM, 2016)

<i>Seam Group</i>	<i>Average Cumulative Coal Apparent Thickness (m)</i>	<i>Maximum Cumulative Coal Apparent Thickness (m)</i>
11	0.06	2.97
10	11.50	34.20
9	25.30	56.80
8	6.50	29.90
5U	45.10	204.30
5L	36.70	140.40

Table 7-2. Coal Seam Thickness of the Sunrise Pit (RPM, 2016)

<i>Seam Group</i>	<i>Average Cumulative Coal Apparent Thickness (m)</i>	<i>Maximum Cumulative Coal Apparent Thickness (m)</i>
7	8.10	20.30
6	19.80	57.30
5U	29.30	100.00

5L	54.30	144.30
4	6.45	24.92

Table 7-3. Coal Seam Thickness of B Field (EAMC, 2022)

<i>Seam Group</i>	<i>Average Cumulative Coal Apparent Thickness (m)</i>	<i>Maximum Cumulative Coal Apparent Thickness (m)</i>
10	8.05	19.61
9	5.88	12.80
8	9.98	20.29
7	4.79	9.20
6	2.18	2.73
4	3.03	6.76
3	4.86	20.95
2	2.61	8.00
1	2.97	5.40

Table 7-4. Nomenclature of Sunrise Seam Groups

Seam Group 7		Seam Group 6U		Seam Group 6L		Seam Group 5U			Seam Group 5L					
7L5		6U2		6L2		5U322	5U32	5U3	5L232			5L2		
7L4		6U12	6U1	6L122	6L1	5U321			5L2312	5L231				
7L32	7L3	6U11		6L121		5U312	5U31		5L2311					
7L31		6U0		6L12		5U311			5L222					
7L2				6L0		5U222	5U22	5U2	5L221	5L22				
7L1				5U221	5L212	5L21								
				5U212	5U21				5L211					
				5U211		5L122	5L1							
				5U12	5U1				5L121	5L12				
				5U11					5L112	5L11				
				5U0					5L111					
										5L0U			5L0	
										5L0L				

Source: RungePincockMinarco (2016)

Table 7-5. Nomenclature of Sunset Seam Groups

Seam Group 10		Seam Group 9		Seam Group 8		Seam Group 5U				Seam Group 5L							
105		952	95	82	8	5U33	5U3	5U	5L32	5L3		5L					
1042	104	951		81		5U32			5L31								
1041		94U		80		5U31			5L232	5L23	5L2						
103U		942	94			5U222	5U22						5L231				
1032	103	941				5U221				5L230	5L22		5L2				
1031		940				5U220	5U21			5L222							
1022	102	932	93			5U212				5L221	5L21						
1021		931				5U211	5U12			5L212							
1012	101	92U				5U210				5U11			5L211	5L12		5L1	
1011		922	91			5U122	5U11						5L122				
		921				5U121				5L121							
		920				5U112				5L112							
		91				5U111				5L111							

Source: RungePincockMinarco (2016)

7.5 COAL QUALITY

Coal quality of each seam group, confined to the in-pit resource (depth within 300m below ground surface) within the Sunrise Pit and the Sunset Pit are determined based on SGS's latest resource model, and 2023 coal production and coal products quality and the master coal quality database.

Table 7-6. Coal Quality by Seam Group – Sunrise Pit (<300m_Drillhole Database)

Coal Seam	TM	IM	ASH	TS	VM	FC	CV	ASG	G _{R,I}
	%, ad	%, ad	%, db	%, ad	%, db	%, ad	cal/g, ad	g/mm ³	
5L	6.25	0.96	13.81	0.99	33.73	52.50	6,555	1.40	58.9
5U	8.15	1.06	13.11	1.05	33.65	59.27	6,450	1.38	57.4
6L	9.81	1.03	13.96	1.03	35.66	51.11	6,423	1.43	68.0
6U	8.21	1.03	14.10	0.96	33.58	52.53	6,443	1.40	62.2
7L	7.80	1.42	14.03	0.89	35.53	49.70	6,291	1.33	39.6
Average	7.67	1.03	13.37	1.03	33.78	56.81	6,476	1.39	58.0

Table 7-7. Coal Quality by Seam Group – Sunset Pit (<300m_Drillhole Database)

<i>Coal Seam</i>	<i>TM</i> <i>%, ad</i>	<i>IM</i> <i>%, ad</i>	<i>ASH</i> <i>%, ad</i>	<i>VM</i> <i>% ad</i>	<i>FC</i> <i>%, ad</i>	<i>TS</i> <i>%, ad</i>	<i>CSN</i>	<i>G_{R.I}</i>	<i>ASG</i> <i>g/mm3</i>	<i>CV</i> <i>cal/g, db</i>
5L	3.54	1.50	11.45	33.49	54.13	0.87	4.7	68.5	1.37	7,095
5u	4.51	1.31	9.69	31.90	57.26	0.75	4.3	66.2	1.35	7,284
S#	5.17	2.39	17.77	32.79	47.52	1.26	2.8	32.8	1.44	6,476
9#	5.59	1.95	15.57	32.98	50.18	1.46	3.6	42.0	1.39	6,667
10#	5.20	1.74	19.25	32.18	47.51	1.38	2.9	0.0	1.45	6,323
Average	4.34	1.60	13.40	32.86	52.66	1.03	4.1	50.2	1.39	6,902

Table 7-8. Coal Quality by Seam Group – B Field (<300m Drillhole Database)

<i>Seam</i> <i>Group</i>	<i>TM</i> <i>%</i>	<i>IM</i> <i>%, ad</i>	<i>ASH</i> <i>%, db</i>	<i>VM</i> <i>%, daf</i>	<i>TS</i> <i>%, ad</i>	<i>G_{R.I}</i>	<i>SG</i> <i>g/mm³</i>	<i>CV</i> <i>cal/g, db</i>
1	6.88	1.48	16.49	42.72	1.14	58.89	1.33	6,370
2	8.06	1.63	17.96	41.18	1.18	58.68	1.33	6,200
3	8.29	1.53	17.01	42.03	1.41	67.72	1.34	6,390
4	7.71	1.57	17.51	41.47	1.61	65.46	1.37	6,347
6	4.23	1.71	10.33	42.43	1.10	63.94	1.33	6,908
7	3.59	1.73	15.02	41.04	1.23	36.33	1.33	6,355
8	4.34	1.65	15.53	41.48	1.23	60.06	1.33	6,454
9	4.31	1.59	17.07	41.40	1.26	47.33	1.34	6,301
10	4.17	1.58	19.14	40.81	1.43	33.27	1.37	6,096
Average	5.73	1.61	16.23	41.62	1.29	54.63	1.34	6,380

BAW understands that all coal products are currently exported to the PRC. Hence, coal quality tests are performed pursuant with the Chinese classification of coals ("GB/T 5751"). Accordingly, the coal seams of the Sunrise Pit, Sunset Pit and B Field Prospect are classified as 1/3 coking coal, gas coal and 1/2 medium caking coal.

8. DEPOSIT TYPES

8.1 GEOLOGY TYPE

According to the GSC 88-21, the Geology Type is determined based on the geological complexity of the coal deposit. The complexity is assessed by considering the seam geometry resulting from both the sedimentary processes during deposition and subsequent deformation. The GSC defines four categories of Geology Type to differentiate the level of complexity within the deposits.

The Geology Type categories, as defined in the GSC 88-21, are as follows:

1. **Low:** This category includes type A, B, and C coal deposits that have minimal tectonic deformation. The coal seams in these deposits are generally unfaulted, although small-displacement normal faults and compaction-related faults may occur. The dip of the coal seams ranges from 0° to 5°.
2. **Moderate:** This category represents coal deposits that have experienced some degree of tectonic deformation. These deposits exhibit homoclines or broad open folds, with the inclination of bedding typically less than 30°.
3. **Complex:** Coal deposits classified as complex have undergone a relatively high level of tectonic deformation. These deposits exhibit structures such as tight folds, some of which may have steeply inclined or overturned limbs, as well as faults.
4. **Severe:** This category encompasses coal deposits that have experienced an extreme level of tectonic deformation. These deposits exhibit common structures such as tight folds, steeply inclined and overturned beds, and large displacement faults. The coal seams in severe deposits may undergo structural thickening and thinning compared to their pre-deformational thickness.

The classification of coal deposits into Geology Type categories by the GSC serves the purpose of providing a framework for understanding and distinguishing the geological complexity of coal deposits. This classification is based on the characteristics of seam geometry resulting from deposition and subsequent deformation processes. By categorizing coal deposits into different Geology Types, the GSC aims to facilitate a better understanding of the geological features and complexities associated with each type. This classification helps geologists and researchers in

assessing and interpreting the structural characteristics, tectonic history, and potential challenges related to coal extraction and mining operations. It also aids in predicting the behavior of coal seams and associated rock formations, guiding decision-making processes in coal exploration and resource evaluation.

In the 2012 Technical Report, RPM determined that the Geology Type of the Coal Mine was described as "Complex." This finding aligns with the classification stated in previous reports prepared and submitted by SQR in accordance with the guidelines of NI 43-101. However, following a site visit conducted in 2015, RPM reevaluated the Geology Type and stated in the 2016 Technical Report that it should be reclassified as "Severe." Based on the drillhole data, it is evident that the Geology Type in the Sunrise Extension area can be categorized as Complex and Severe (RPM, 2016). The difficulties encountered in interpreting and correlating the seams indicate the complexity of the geological conditions in the area.

To address the issue on Geology Type and prepare an updated mine plan, SQR engaged DMCL in late 2016 to conduct an independent technical review, considering the latest information and mining operations, including additional drilling carried out after the 2015 site visit mentioned in the 2016 Technical Report. After analyzing the drillhole data and resource model, DMCL's 2017 Technical Report determined that the coal mine had undergone significant tectonic deformation. This deformation included the presence of an east-west trending regional thrust fault, where the hanging wall strata had experienced various secondary foldings. The coal seams in the mine generally exhibited inclinations between 35° and 55°, although occasional sub-vertical dips were observed.

According to the findings outlined in the 2017 Technical Report of DMCL, there was inadequate evidence to substantiate the Geology Type classification stated in the 2016 Technical Report. Specifically, in the Sunrise and Sunset Pits, significant displacement along faults were generally not present. It was observed that tight folds, steeply inclined beds, and overturned beds were not commonly encountered in those areas (Figures 8-1 and Figure 8-2).

The discrepancies in the Geology Type conclusions between the 2016 and 2017 Technical Reports can be attributed to DMCL's ability to directly observe coal seams exposed during



mining operations in 2017 (refer to Figure 8-3, Figure 8-4 and Figure 8-5). These observed coal seams exhibited normal stratigraphic sequences, thickness, and continuity.

BAW supports the findings of the 2017 Technical Report, confirming that the Geology Type classification of the Coal Mine is under the Complex category.

BAW's technical review of the B Field Prospect indicates that less drilling and technical studies have been completed relative to the producing pits, leading to a preliminary stage of structural comprehension. Currently, the B Field Prospect is categorized under the Severe Geology-Type due to the presence of tight folds, steeply inclined beds, and faulting observed in the core samples and neighboring operational mine. Coal seams within the B Field Prospect typically dip from 12° to 83°.



Figure 8-1. Inclined coal seams are observed at the Sunset Pit but the coal seams and stratigraphy are generally very continuous (looking northeast)



Figure 8-2. Tight folds and steep inclined beds are observed at Sunrise Pit but the coal seams and stratigraphy are generally very continuous (looking northwest)



Figure 8-3. The coal seams and stratigraphy are generally very continuous at the Sunset Pit. Extensive tight folds, steeply inclined and overturned beds and large displacement faults are not observed at the Sunset Pit (retrieved from the 2017 Technical Report)



Figure 8-4. The coal seams and stratigraphy generally do not show extensive tight folds, steeply inclined and overturned beds and large displacement faults at the Sunrise Main Pit (retrieved from the 2017 Technical Report)



Figure 8-5. The coal seams and stratigraphy generally do not show extensive tight folds, steeply inclined and overturned beds and large displacement faults at the Sunrise Extension Pit (retrieved from the 2017 Technical Report)

8.2 DEPOSIT TYPE

The GSC 88-21 defined deposit type as the probable extraction method that would be used to recover coal, as the mining method in many instances dictates the manner of calculation quantification parameters as seam thickness. The deposit type is categorized into four groups: surface, underground, non-conventional, and sterilized. Each category is defined as follows:

1. Surface: This category encompasses deposits that can be extracted by removing overburden from the surface using techniques such as truck/shovel, dragline, or other mining methods. Coal seams that extend from the original ground surface down to a depth of 300 m are classified as surface mineable deposits, typically extracted through the open-pit mining method.
2. Underground: These are deposits that would be extracted using techniques such as room-and-pillar, short wall, long wall, and hydraulic methods from surface drainages.
3. Non-conventional: This category includes deposits that are located at significant depths and are extracted using techniques such as in-situ gasification or other unconventional methods.
4. Sterilized: These deposits are unavailable for mining due to restrictions imposed by legislation, environmental concerns, or other factors.

According to the 2012 Technical Report, coal resources located between 300 m and 600 m from the ground surface were classified as underground Resources. However, in the 2016 Technical Report, these resources were deemed to have no reasonable prospects for economic extraction using underground mining methods. As a result, the mineral resource estimate in that report did not include any underground Resources. This conclusion has been reached based on the revision of the geological understanding of the deposit, which was learnt by a review of drillhole data and observations made during the site visit.

Nevertheless, the 2017 Technical Report by DMCL presented another perspective that there are reasonable prospects for extracting coal resources between 300 m and 500 m using underground mining methods, under the following conditions:

- a) Significant improvements in the Chinese coal market conditions compared to those at the time of the 2016 Technical Report; and



- b) Substantial increase in coal prices, surpassing the levels observed in 2015 and 2016.

BAW is of the opinion that these factors collectively suggest the potential for economically extracting coal resources through underground mining methods within the specified depth range.

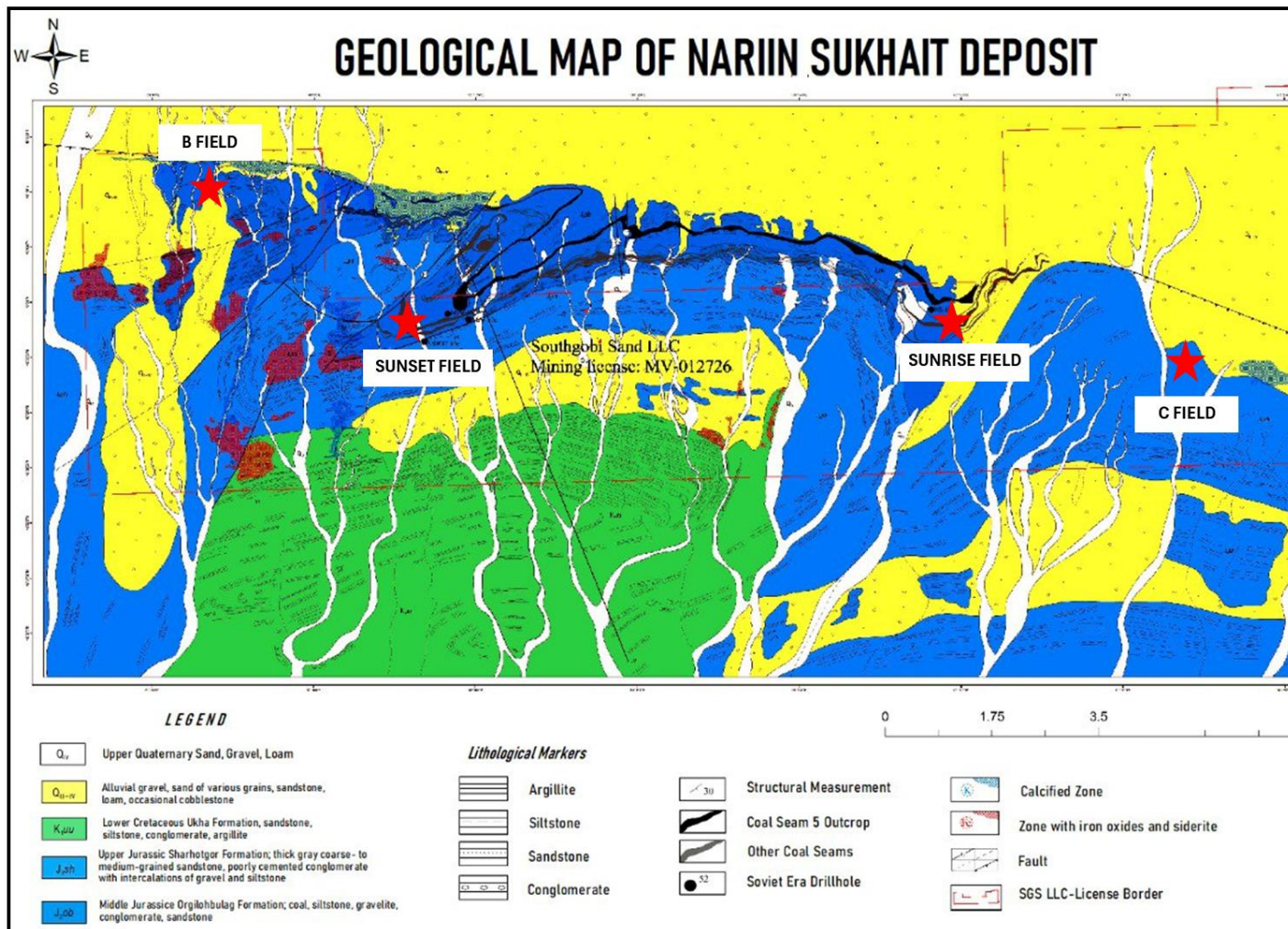
9. EXPLORATION

9.1 INTRODUCTION

In late 2004, IVN conducted the initial modern systematic exploration at Ovoot Tolgoi. This phase involved drilling five boreholes in the Ovoot Tolgoi Deposit area, which is now part of the mining license under SGS. From 2005 to 2006, exploration drilling activities continued with a primary focus on delineating the surface resource. Additionally, general exploration activities were carried out along the entire Nariin Sukhait trend. In 2008, the exploration drilling activities shifted towards expanding the underground resource in the Sunset Field. In 2010, the exploration efforts included infill drilling and extended drillhole coverage in the western part of the Sunrise Field. In 2011, the exploration work involved further infill drilling and increased drillhole coverage in the Sunset Extension. The 2014 drilling program exclusively targeted the Sunrise Field, with 14 drillholes in the Sunrise Extension and 3 drillholes in the western part of the Sunrise Main Pit. In 2016, a total of 22 drillholes were completed, with the primary objective of testing the further extension of coal resources beyond the current area of operation.

Several geological explorations and mapping activities were previously conducted in the Nariin Sukhait Coal Deposit to identify the lithology and mineralization in the area (refer to

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). The summary of the results of these activities is tabulated below.

Table 9-1. Summary of Accomplishments of Exploration and Mapping Activities in Nariin Sukhait Coal Deposit

Year	Leading Person(s)	Accomplishments
1951-1952	V.S. Volkhonin	Prospecting work was carried out over a vast area encompassing the entire district on a scale of 1:500,000. During this exploration, coal occurrences labeled as Mr. I and II were discovered.
1954	I.A.	Under the leadership of Efrimov, the Russian paleontological expedition identified continental sediments of Permian age in the area. This was the first time such sediments were distinguished in the region.

Year	Leading Person(s)	Accomplishments
1959	V.S. Volkhonin	Volkhonin postulated that the volcanic sediments underlying the sediments were of the same age as the sedimentary layers and identified it to be Carboniferous in age.
1960	A.A. Kurlesh	Exploration and examination of coal in the district was conducted. During this exploration, the Gurvantes coal deposit was discovered in the area marked as the 17704-17708 square. The reserves of the Gurvantes coal deposit were estimated to be 327 thousand tons with grade A, 132 thousand tons with grade B, and 202 thousand tons with grade C1, making a total of 661 thousand tons. Furthermore, based on the findings from the Khokh Dovi well, a route survey was conducted to gather additional information and insights.
1971	I.I. Volchka, B. Luvsandanzan, O.D. Suetenko, and others	A thematic study was conducted to examine the stratigraphic classification of Paleozoic sediments in the district. This study aimed to validate the age of the sediments previously determined by the researchers mentioned. By analyzing paleontological findings, the age of the sediments was confirmed and further supported.
	D. Dashceren and S. Jagar	Prospecting work was carried out in the Nariin Sukhait deposit, leading to the discovery of 11 coal layers. The estimated total coal deposit up to a depth of 10 meters was determined to be 1.25 thousand tons.
1976	A.A. Massovsky, O. Timurtogo, G. Badarch, and others	A thematic study specifically targeting the tectonic and stratigraphic aspects of Triassic sediments was undertaken. They identified the Noyon Sum depression, which is acknowledged as the largest continental structure encompassing Triassic sediments within the territory of the country.
1992	J. Dashkhorol	Exploration work was conducted in the Nariin Sukhait deposit, and in certain areas, the resources were found to be potentially viable for production. Specifically, in the Huren Tologi and Eastern parts of the deposit, the reserves were calculated to be 35,899.5 thousand tons in total, considering different production levels (A+B+C). Furthermore, it is estimated that the total coal deposit at a depth of 75-90 meters amounts to approximately 125,519.9 thousand tons. This estimation reflects the potential coal resources available within that specific depth range.

Year	Leading Person(s)	Accomplishments
1996	Marc S. Hendrix, Stephan A. Graham, and others	In the lithology and facies studies conducted in the syncline, the aim was to understand the ancient flows and determine the origin of sediment in the Permian, Triassic, and Jurassic periods. The findings suggest the following: 1. Lower Triassic sediments originated from plain rivers and permanent water bodies, indicating deposition in meandering rivers, floodplains, or deltaic environments. 2. Middle Triassic sediments were deposited by fast-flowing rivers and temporary watercourses in the foothills of high mountains, suggesting a dynamic and energetic depositional environment. 3. Upper Triassic sediments have a riverine origin, indicating deposition in river systems. Lower Jurassic sediments have a lacustrine origin, suggesting deposition in a lake environment. These lithology and facies studies provided valuable insights into the paleoenvironmental conditions and depositional settings within the Mr. syncline during the studied periods.
1996-1997	S. Bokhbat, Ts. Naranbaatar, G. Badarch, and O. Davaa	Geological grouping mapping work was conducted in the Nemegt area on a scale of 1:200,000. During this study, the coal deposit of Nariin Sukhait was identified as being of Triassic age.
2002-2006	L. Munkhtogoo and G. Gantulga	Four coal layers have been identified within the sedimentary rocks of the Nariin Sukhait region, dating back to the Middle Jurassic period (Upper Triassic-Lower Jurassic). However, only Seam No. 5 has been discovered and thoroughly studied in the central and eastern parts of the area.
2008-2013	Ch. Minjin and T. Uranbileg	Research conducted on various aspects of the geological structure of the coal deposits and occurrences in the Gurvantes-Noyon district was investigated. This included analyzing the geological age of the sediments containing the coal strata, studying the lithological characteristics of the coal-bearing sediments, describing the plant and grain content within them, and determining their stratigraphic position.

Year	Leading Person(s)	Accomplishments
		As a result of this research, it was determined that the Gurvantes-Noyon District, including the Nariin Sukhait Coal Deposit, belongs to the Middle Jurassic Orgilohbulag Formation (J2ob). These findings were then incorporated into the geological map of the deposit, which was approved by the Stratigraphic Commission in 2015. Consequently, the age of the coal deposits is being categorized and mapped accordingly.
2006-2014	G. Altankhuyag	The total coal reserves highlighted in the A+B+C levels amounted to 345.2 million tons. These reserves represent the estimated amount of coal present in the surveyed area based on the exploration data collected during the specified period.

Other exploration activities conducted in the area include field reconnaissance mapping, satellite imagery, lineament studies from aerial photographs, surface-resistivity geophysical surveying and trenching.

9.2 SERVICE CONTRACTORS

Sapphire, initially under the supervision of IVN and later SGS, was contracted for geological exploration field work at Ovoot Tolgoi. The scope of their activities included tasks such as reconnaissance mapping, trenching, descriptions of drilling returns, geotechnical data field logs, and database development. Sapphire provided competent exploration geologists for a period of six years, with responsibilities including mapping, recording drilled lithology descriptions, rock quality determination (RQD), assessing fracture frequency, conducting field point-load testing, performing field free swelling index (FSI) tests, sampling, sample preparation, and ensuring sample security. These activities were carried out in accordance with quality assurance procedures implemented in 2005. Standardized log forms and laboratory instruction forms in English have been used since 2005 to document all geological data.

Norwest provided support in reviewing the activities and interpreting the findings of the geological exploration at Ovoot Tolgoi during the years 2005 and 2006. On the other hand, Sapphire took on the role of personally supervising and assisting SGS in reviewing the activities

and interpreting the results in the years 2007, 2008, and 2011. The 2010 exploration program was directed by McElroy Bryan.

9.3 GEOLOGICAL MAPPING

Reconnaissance geological mapping has been conducted with the objective of identifying surface exposures of coal resources and determining the presence of geological structures. This mapping process involves systematically surveying and documenting the geological features and formations present in the area of interest. By locating surface exposures of coal resources, the distribution, extent, and quality of coal deposits can be identified. Furthermore, identifying structures such as faults, folds, or fractures is crucial for understanding the geological framework and potential controls on the occurrence and accessibility of coal resources. The information gathered from reconnaissance geological mapping helped in the subsequent resource assessment and planning for potential mining activities.

9.4 TRENCHING

Backhoe trenching has been utilized to investigate the interpreted trend of the coal seams in the area. This method involves excavating trenches along the suspected path of the coal seams to gain a better understanding of their presence and to aid in the placement of exploratory drill holes. Trenching has proven to be particularly useful in areas with shallow cover, where direct surface exposure of the coal seams may be limited.

However, it is important to note that the information obtained from trenching is subject to certain limitations. The observed coal seam thickness and structures in the trenches can be significantly influenced by near-surface erosion, alteration, and deformation processes. As a result, the intercepts and characteristics observed in the trenches may not accurately represent the true nature and quality of the coal seams.

Due to the potential unreliability of trenching intercepts as sources of seam characteristics and structures, they are typically not utilized in the estimation of coal resources. Instead, more

reliable data from exploratory drill holes and other comprehensive geological investigations are used for resource estimation purposes.

9.5 SATELLITE IMAGERY

Satellite imagery has been employed as a valuable tool in identifying coal seam outcroppings and interpreting the trend of coal seams. By analyzing high-resolution satellite images, coal seams based on distinct visual characteristics such as color, texture, and topographic patterns can be detected. These outcroppings provide important information regarding the presence, extent, and general orientation of the coal seams. While satellite imagery is a valuable tool in coal seam identification and trend interpretation, other geological data and field observations were also used for a comprehensive understanding of the coal deposit.

9.6 GEOPHYSICAL SURVEYS

3-D and 2-D surface resistivity surveys have been utilized to locate mineralization in areas where there is a thin cover of surficial material. In addition to resistivity surveys, the area has also been covered by BHP's Falcon survey. The Falcon survey is a combined geophysical survey that integrates gravity, magnetic, and radiometric data collection. By combining the data from these different geophysical surveys, a comprehensive understanding of the subsurface characteristics and potential areas of mineralization can be determined. The information obtained from these surveys has been instrumental in guiding subsequent drilling activities.

9.7 DRILLING

The details of the exploratory drilling program are provided in Section 10 of this TR.

9.8 COORDINATES AND DATUM

The Coal Mine is located in Universal Transverse Mercator (“UTM”) Zone 47, which falls within the Northern Hemisphere and utilizes the WGS 48 coordinate system. In this coordinate system, the drillhole collars are surveyed and reported using the UTM grid system. However, it is worth noting that the license coordinates, which refer to the location of the mining license boundaries or other administrative boundaries, are typically surveyed and reported using longitude and latitude coordinates.

9.9 RESULTS

The exploration process at the Coal Mine involved a combination of geological mapping, analysis of satellite imagery, 3-D and 2-D surface resistivity surveys, trenching, and drilling to define the trend of the coal seams, interpret the structure and geology, and identify potential targets.

Geological mapping provided a detailed understanding of the surface geology, including the distribution of rock formations, structures, and potential coal-bearing units. Satellite imagery analysis helped identify surface expressions of coal seams based on visual characteristics such as color, texture, and topographic patterns. This information helped in defining the trend or direction of the coal seams.

3-D and 2-D surface resistivity surveys were employed to assess the electrical resistivity of the subsurface and identify areas with different subsurface properties, potentially indicating the presence of coal mineralization.

To further investigate the potential targets identified through these techniques, trenching was conducted. Trenches were excavated perpendicular to the apparent strike of the coal seams, exposing the coal seams near the surface. This allowed for direct observation and sampling of the coal seams and provided additional information on their thickness, quality, and structural characteristics.



Further, drilling was carried out to test the coal seams identified through trenching and other exploration methods. By drilling exploratory boreholes, core samples were obtained, providing detailed information on the composition, structure, and mineral content of the coal seams. These data were crucial for resource estimation, coal quality and mine planning.

10. DRILLING

10.1 INTRODUCTION

Limited drilling activities were accomplished during the Soviet/Mongolian government-sponsored exploration programs. An exploration program was conducted by IVN in 2004 to 2006 over both the Sunset and Sunrise Fields wherein a section line spacing of approximately 150 meters to 200 meters was employed with a drillhole spacing along a section line of approximately 50 meters. Drilling activities were further conducted by SGS from 2007 to 2011 to expand its coverage. In 2008, deeper areas of Sunrise Field were the focus for drilling with the purpose of proving up the underground resource. To upgrade the resource classification, deeper areas of the Sunrise Field were further drilled in 2014. A total of twenty-two (22) drillholes were completed in 2016 wherein majority of the exploration drillings were planned to test the further extension of coal resource outside the current operation area. The summary of drilling method and drilled area is presented in Table 10-1.

All drill holes have been geophysically logged, except in instances where holes have collapsed. Depending on the equipment employed, logs were either visually inspected or analyzed using geophysical logging software. The depths of the drilled seam intersections were subsequently integrated into the geological model.

The table below provides information on the drilling activities conducted in different areas, namely the Sunrise Pit, Sunset Pit, B Field Prospect, and C Field Prospect since 2005. In the Sunrise Pit, 5 boreholes were drilled by IVN, totaling 687 meters in 2004. Exploration drilling activities continued in subsequent years, with the highest number of drillholes of 131 and the highest meters drilled 22,948 occurring in 2005. Additional drilling was carried out in 2006, 2007, 2010, 2014, 2016, 2018, 2019, 2020, and 2023. The total number of drilled holes is 288 with cumulative meterage of 53,971.5 meters using a combination of rotary, reverse circulation, and diamond drilling. All completed drillholes starting 2016 are diamond drillholes (cored).

Exploration drilling in the Sunset Pit commenced in 2005 and extended over multiple subsequent years. The drilling activities took place in 2005, 2006, 2007, 2008, 2011, 2018, and 2023. In total, 305 drillholes were completed, with a cumulative drilled depth of 80,926.5



meters. A notable amount of exploration drilling took place in the Sunset Field, with a total of 100 drillholes completed in 2005. This intensive drilling activity resulted in a cumulative drilled depth of 17,114 meters. This was followed up with a core drilling of 40 drillholes totaling 22,792 meters in 2008.

Drilling activities in B Field were conducted by Tanan Impex and Sant Sharga over multiple years. Specifically, drilling took place in 2005, 2006, 2007, 2011, and 2016. During these drilling activities, a total of 80 drillholes were completed, resulting in a cumulative drilled depth of 12,973.8 meters. The highest number of drilled holes was in 2011 with a total of 24 holes and a total drilled depth of 4,777 meters. Meanwhile, Agdir International conducted drilling activities in the C Field Prospect in 2023, totaling 5 holes and 726 meters drilled.

Across all fields, a total of 679 drillholes were completed, with a combined drilled depth of 148,746.8 meters. These drilling activities were carried out by several different companies, including IVN, SGS, Sapphire, McElroy Bryan, Tanan Impex, Norwest, Top Diamond, Sant Sharga, and Agdir International.

Table 10-1. Summary of Historic Exploration Drilling

<i>Field</i>	<i>Year</i>	<i>Core</i>		<i>Open</i>		<i>Total</i>		<i>Management/ Company</i>
		<i>No. of Holes</i>	<i>Metres drilled</i>	<i>No. of Holes</i>	<i>Metres drilled</i>	<i>No. of Holes</i>	<i>Metres drilled</i>	
Sunrise Pit	2004	5	687.00	-	-	5	687.00	IVN
	2005	38	6,248.00	93	16,700.00	131	22,948.00	IVN
	2006	3	1,273.00	27	6,089.00	30	7,362.00	SGS/Sapphire
	2007	1	254.00	17	3,438.00	18	3,692.00	SGS/Sapphire
	2010	6	993.00	53	10,459.00	59	11,452.00	McElroy Bryan/Tanan Impex
	2014	17	2,446.00	-	-	17	2,446.00	Top Diamond
	2016	2	350.00	-	-	2	350.00	Sant Sharga
	2018	5	939.50	-	-	5	939.50	Sant Sharga
	2019	7	1,233.30	-	-	7	1,233.30	SGS
	2020	7	1,676.40	-	-	7	1,676.40	SGS

Field	Core			Open		Total		Management/ Company
	Year	No. of Holes	Metres drilled	No. of Holes	Metres drilled	No. of Holes	Metres drilled	
	2023	7	1,184.30	-	-	7	1,184.30	Agdir International
	Sub-total	98.0	17,284.5	190	36,686.0	288.0	53,970.5	
Sunset Pit	2005	13	2,034.00	87	15,080.00	100	17,114.00	Norwest/Sapphire
	2006	24	5,187.00	47	10,738.00	71	15,925.00	Norwest/Sapphire
	2007	7	2,797.00	23	5,333.00	30	8,130.00	SGS/Sapphire
	2008	40	22,792.00	-	-	40	22,792.00	SGS/Sapphire
	2011	37	9,110.00	20	6,660.00	57	15,770.00	SGS/Sapphire
	2018	2	161.00	-	-	2	161.00	Sant Sharga
	2023	5	1,034.50	-	-	5	1,034.50	Agdir International
	Sub-total	128	43,115.50	177	37,811.00	305	80,926.50	
B Field	2005	-	-	20	2,877.00	20	2,877.00	Tanan Impex/Major UDR
	2006	3	460.90	13	1,896.40	16	2,357.30	Tanan Impex
	2007	-	-	2	345.00	2.0	345.00	Tanan Impex
	2011	-	-	24	4,777.00	24	4,777.00	Tanan Impex
	2016	18	2,617.5	-	-	18	2,617.50	Sant Sharga
	Sub-total	21	3,078.40	59	9,895.40	80	12,973.80	
C Field	2023	6	876.00	-	-	6	876.00	Agdir International
	Sub-total	6	876.00	0	0.00	6	876.00	
TOTAL		253	64,354.40	426	84,392.40	679	148,746.80	

Note: 7 water bores drilled in the Sunrise Pit and 13 drill-holes located on the adjacent MAK's concession were incorporated into the geological database for modelling purposes but not shown above.

10.2 DIAMOND DRILLING

Core drilling was employed to obtain comprehensive and representative coal samples from the Sunset Pit, Sunrise Pit, B Field Prospect, and C Field Prospect for quality testing and to

accurately determine the depths of lithological contacts. The number of cored holes completed across the fields is shown in Table 10-1.

10.3 CORE DRILLING PROCEDURES

Drilling operations at Nariin Sukhait have utilized a range of core drilling equipment and have been overseen by different entities over time. Initially, some of the early core holes at Nariin Sukhait were drilled using single-tube Russian-made core equipment. However, the majority of the core drilling at Nariin Sukhait has been carried out using wireline drilling systems and modern triple-tube core barrels.

During the 2005 and 2006 drill programs, triple-tube coring was performed under the supervision of Norwest. In subsequent years, the triple-tube coring completed during the 2007, 2008, and 2011 drill programs were conducted by Sapphire under the supervision of SGS. Similarly, the 2010 drilling program was supervised by MBGS. For the 2014 until 2023 exploration program, triple-tube coring methods were utilized, and SGS personnel were responsible for collecting the core samples.

10.4 COLLAR SURVEYS

Drillhole collars at Nariin Sukhait are positioned using GPS for accurate and precise positioning of drillhole locations.

10.5 DOWNHOLE SURVEYS

At Nariin Sukhait, downhole geophysical surveys have been undertaken on most drill holes to acquire supplementary data regarding subsurface conditions and to precisely delineate coal intervals. These surveys usually encompass measurements such as Caliper, Gamma, and Density.

Downhole geophysical surveys have been extensively carried out at Nariin Sukhait. However, there has been limited implementation of downhole verticality surveys on the drill holes. Downhole verticality surveys entail measuring and evaluating the borehole's deviation or inclination from the vertical direction. These surveys are crucial for deep drill holes (ranging from 300 m to 400 m) to guarantee precise depiction of subsurface geology and assist in interpreting geological and geophysical data accurately.

10.6 CORE RECOVERY

Core recovery is logged and assessed to ensure accurate data interpretation. The recovered core length is compared to the core run length recorded by the driller to determine the percentage of core recovery. The recovered core is measured and compared to the coal interval thickness determined from geophysical logs. This helps identify any discrepancies and variations in coal seam thickness. These assessments ensure the reliability of data for resource estimation and mine planning.

10.7 DENSITY

The determination of Relative Density (RD) played a significant role in assessing coal samples. RD tests were conducted on a substantial number of coal samples to determine their density characteristics. However, for some samples where RD values were not directly measured, an estimation was made using the relationship between Ash content and RD based on available sample data.

To convert RD values to RD in-situ values, the Preston-Sanders equation was applied. The RD in-situ values were then used to calculate the tonnage of coal resources. This conversion accounts for the change in density that occurs when coal is extracted from its natural environment and brought to the surface. Additionally, Apparent Relative Density (ARD) values were collected for a large number of samples, but they were not utilized in the assessment process.

10.8 LOGGING

During the drilling programs at Nariin Sukhait, core logging and sample handling were carried out by different entities under supervision. In the 2005 and 2006 programs, Sapphire performed core logging and sample handling under the supervision of Norwest. For the 2007, 2008, and 2011 programs, SGS supervised these activities, while Tanan Impex handled core logging and sample handling under MBGS supervision for the 2010 program.

The core at Nariin Sukhait was obtained, logged, and sealed in accordance with the Norwest conventions established in 2005. During the logging process, each core run was measured to compare the total length of core cut with the length of core recovered. Photographs were taken at intervals of 0.5 meters. When coal exhibited distinct lithological variations or partings larger than 0.05 meters, separate samples were taken. For coal intervals with a uniform appearance, they were bagged in 0.6-meter increments based on the length of the core box. In cases where there was a significant loss of core exceeding 0.1 meters, separate samples were collected both above and below the affected zone. The intercept depths and seam thickness were reported based on apparent thickness.

During the 2005 to 2008 drilling programs at Nariin Sukhait, geophysical logging was conducted for most of the drillholes, except for holes that had collapsed. The specific equipment used determined whether the logs were visually examined or interpreted using Norwest's Elogger software. In the 2010 and 2011 drilling programs, all drillholes were geophysically logged, except for those that had collapsed. The depths obtained from the drillhole logging were subsequently integrated into the geologic model, enhancing the understanding of the geological structure and characteristics of the area.

During the 2014 exploration program at Nariin Sukhait, SGS personnel conducted basic lithological logging and sampling of coal intervals at 1-meter intervals. Additionally, downhole geophysical surveys were conducted on all drillholes as part of the program. Core recovery was carefully recorded, and photographs of the core were taken to document its appearance and condition. To ensure accuracy, the lithological logs and sample intervals were corrected based on the interval depths interpreted from the downhole geophysical surveys.

10.9 RC/CORE DRILLING

During the 2005 and 2006 drilling periods, the use of reverse circulation (RC) drilling provided well-preserved cuttings samples. These samples were collected at 1-meter intervals, and the cuttings were arranged in rows on the ground for examination and logging by the on-site geologist from Sapphire. In some cases, a conventional air-rotary drilling system was used instead of RC drilling. For these holes, the cuttings were also laid out on the ground and logged in a similar manner as with RC drilling.

During the drilling programs in 2007, 2008, and 2010, all holes were either drilled using conventional air-rotary systems or cored. During the 2011 program, the holes were drilled using either PCD conventional drilling or core drilling methods. In the subsequent drilling programs in 2014, 2016, 2018, 2019, 2020 and 2023, diamond drilling techniques were employed.

10.10 COMMENT ON SECTION 10

The QP is of the opinion that the data collected from the lithological, geotechnical, geophysical, collar, and downhole survey in the exploration, infill, and production drill programs is of sufficient quantity and quality to support the estimation of Resources and Reserves. The QP has not identified any significant drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the estimation results. Therefore, the QP is confident that the Resource and Reserve estimation is accurate and reliable based on the available data.

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 INTRODUCTION

At the Coal Mine, most exploration holes have been drilled using rotary techniques. This drilling method involves the use of a rotating drill bit to penetrate the ground, resulting in the collection of drill cuttings as samples. Although sampling only drill cuttings have its limitations, it can still provide valuable insights into the general geological characteristics of the deposit, including the presence of coal seams and their approximate thickness. All quality analyses used for modelling were taken from core samples, which were obtained using triple-tube coring equipment. Out of the total 611 drillholes in the Coal Mine, 182 drillholes have been designated as coal quality holes. In B Field, 18 out of the 80 drillholes are classified as coal quality holes.

11.2 SAMPLING FOR CORE SAMPLES

The information provided below outlines the sampling and analysis procedures followed by SGS for coal samples at the Coal Mine.

- Coal samples are collected based on lithological changes within the drilled core.
- Core recovery is recorded by comparing the recovered core length with the recorded core run length by the driller.
- The geophysical log suite thickness is compared to the recovered core measurement.
- In zones of uniform coal appearance, samples are bagged about every 0.6 m to 1 m as per the capacity of the core boxes.
- In-seam partings up to 0.1 m thickness are included in coal samples if the adjacent coal beds above and below the parting are both at least twice the thickness of the parting.
- Partings of non-coal lithology types >0.1 m in thickness, carbonaceous shale, bone, interbedded coal/mudstone, or comprising >50% coal are sampled separately.
- Samples are cleaned to remove any contaminants.
- The core is placed in an individual plastic bag, sealed with tape to prevent excessive moisture loss, and labeled with drillhole and sample numbers.
- Samples are placed in-sequence into waxed-cardboard core boxes.
- Core boxes are sealed with tape.

- Core is transported to the company's office in Ulaanbaatar.
- Samples are shipped to certified and accredited laboratories for coal quality or rock strength analyses.
- Laboratory instructions and shipment manifests are compared with the contents upon arrival at the laboratory.
- Standard methods for the coal industry are used for sample analysis.
- Laboratories used are SGS Mineral Labs in Denver, Colorado (ISO-9000 certified, accredited by NQA in the United States of America), and SGS Laboratories in Tianjin, PRC (currently holds ISO-17025 certification, accredited by the CNAS (China National Accreditation Service for Conformity Assessment), and SGS laboratory located on site. In January 2023, China Certification & Inspection Group Fujian Co., Ltd. (CCIC) established an onsite laboratory which replaced SGS laboratory. CCIC currently holds ISO/IEC 17020 and ISO/IEC 17025 certifications, accredited by CNAS. These laboratories used by SGS are independent service providers and have no present or prospective interests in SGS or its mining properties.
- Core samples undergo a comprehensive suite of coal quality testing, including short proximate, full proximate, thermal tests, ash analysis, washability testing, and metallurgical testing.

11.3 SAMPLING FOR RC SAMPLES

The sampling procedure of RC samples adopted by SGS is summarized below.

- Samples are collected at 1.0 m intervals and placed into plastic bags.
- Bags are sealed with plastic tape to prevent excessive moisture loss and labelled on the outside with drillhole and sample number.
- Samples are grouped by holes into larger bags, packaged, and transported to the SGS's office in Ulaanbaatar.
- Samples are submitted for proximate and thermal analysis.
- The remainder of the samples have been stored at the SGS's facilities.



BAW was not involved in the exploration program from 2005-2023 such that we would not be able to physically verify the logging, sampling protocols and chain of custody initially set up by Norwest. Moreover, BAW did not participate in logging and sampling campaigns of the company. BAW was, however, able to verify the geological logs, geophysical logs and documented sampling protocols and chain of custody used by SGS coupled with personal interviews with the geologists of the company. BAW is satisfied with its reasonableness and adherence to the logging and sampling procedures. This practice is currently being maintained throughout SGS's exploration activities.

11.4 COMMENT ON SECTION 11

The QP is not aware of any significant concerns regarding the sample preparation, security, and analytical procedures that could have a material impact on the accuracy and reliability of the results. The processes involved in sample handling, security measures, and analytical procedures have been conducted appropriately and in accordance with the required standards. Therefore, the QP is confident that the Resource and Reserve estimation is accurate and reliable based on the available data.

12. DATA VERIFICATION

12.1 DATA COLLECTION PROTOCOLS

Since the establishment of the exploration camp in 2005 at the Coal Mine, the tasks of data collection, verification, and storage have been managed by various independent consultants employed by SGS.

From 2005 to 2006, Norwest took direct responsibility for managing the exploration program of SGS. This involved overseeing various aspects, including the initial planning of exploration targets, data collection, as well as the interpretation and analysis of the findings. Norwest provided on-site management for the majority of the exploration programs during that time. All data collection adhered to protocols established in 2005 by QP engaged by Norwest at the Coal Mine. These protocols covered drilling, coring, sampling methodology, and sample preparation which were described in previous sections.

From 2007 to 2008 and again in 2010 and 2011, even though Norwest was no longer engaged at The Coal Mine, the data collection protocols originally established by Norwest were maintained under the supervision of SGS and McElroy Bryan geological personnel. During the 2010 field season, data was managed on-site by MBGS. From 2011 to 2016, data were managed on-site by SGS whereas RPM was actively involved in the management of sampling protocols, geological database, and resource models together with SGS. Since 2017 to date, SGS personnel have managed all exploration work.

BAW was not able to physically confirm whether the protocols established by Norwest for the logging of rotary, percussion and core drill holes were adhered in any of the field season from 2005 to 2023 as BAW was not on-site during the logging and drilling operations during those timeframes. The QP involved in the previous technical reports stated that they were satisfied with the data collection protocols.

BAW has assessed the protocols established by Norwest for geological data collection and deems them fair and suitable for this type of deposit. Additionally, BAW has reviewed logging

and sampling sheets and engaged in discussions with SGS geologists regarding the protocols employed, finding their responses satisfactory.

12.2 DATABASE MANAGEMENT

The database management protocols currently utilized by SGS were initially created by Norwest, TAG, Sapphire, and MBGS during various stages of their exploration programs. The management protocols are summarized below.

- Mapping activities were conducted and stored electronically using a computer-aided design (CAD) system.
- Field geological data was transmitted to the relevant office daily in electronic form.
- Geologists thoroughly examined the geological and geophysical logs.
- Exploration management comments and procedural instructions were electronically managed and reported daily.
- On-site personnel were responsible for entering and managing all geological data.
- Geologists reviewed and validated all geological, geophysical, and sampling data before they were submitted.
- Validated data were entered into an electronic database and geological modeling software.
- Regularly updated cross-sections and digital models were generated for ongoing analyses.
- Results from coal quality testing were incorporated into the office database.
- Reported intercept depths and seam thickness were based on the apparent thickness of the beds as observed in the drillhole data.

As the mining operation progresses, it is advisable to consistently implement a sound database management practice. This involves regularly consolidating the most up-to-date geological data into a comprehensive database to ensure efficient storage and preservation of data lineage.

12.3 DATABASE VERIFICATION

The geological database at the Ovoot Tolgoi Coal Mine is actively managed by SGS and has been cross-checked against original drillhole records by various QPs involved in previous technical reports. This database was recently updated in 2023 to ensure accuracy and reliability.

The QP overseeing the validation of the geological database conducted a detailed comparison between the information stored in the database and the original drillhole records. This validation process entailed ensuring the accuracy and consistency of the data in the geological database by cross-referencing it with the original drillhole records.

BAW also conducted on-site "ground truthing" by randomly selecting a few drillholes from the 2018 and 2023 drillhole database during a site visit. The drillhole collar coordinates in the current database were confirmed to be precise. Additionally, BAW cross-checked some drillhole collars against original survey records and elevations in the Digital Terrain Model ("DTM"), concluding that the current database is both accurate and representative.

The accuracy of seam picks recorded in the database was verified by previous QPs until 2016 by comparing them with original lithological logs, core photos, and geophysical logs. This detailed review led to minor adjustments in the database. In the database, parting lithologies thicker than 0.3 m are not considered part of a seam ply, while those less than 0.3 m can be included within the seam ply. Typically, the minimum thickness identified for a coal ply is 0.5 m. There are instances of thin coal intersections in the drillhole records that were excluded from the database due to uncertainties in seam picks and interpretations. However, these exclusions are not anticipated to significantly impact the geological model. BAW validated these adjustments by creating random cross sections to visually assess their representativeness.

BAW received scanned copies of field lithology logs and geophysical logs for evaluation. During the review, seam picks depths in specific drillholes were adjusted to align with the corresponding depths noted in the geophysical logs. Notably, physical lithological logs were not provided. Instead, scanned copies were supplied for reference during the review. BAW deemed reliance on these scanned copies to be satisfactory for their assessment.

BAW conducted a comprehensive review of the coal quality data within the database spanning from 2016 to 2023, cross-referencing it with the original laboratory findings. This evaluation primarily targeted a representative selection of drillholes. Throughout this process, the moisture content recorded in the database was meticulously scrutinized and adjusted where necessary to ensure accurate representation of the coal's moisture content on an air-dried ("ad") basis, as applicable. Moreover, the database underwent enhancements to distinguish between Relative Density ("RD") and Apparent Relative Density ("ARD") data, guided by a detailed examination of the original laboratory reports. Basic statistical and regression analyses were then applied to key coal quality parameters to extract deeper insights. Anomalies were meticulously identified during the analysis and cross-checked with the original laboratory records to guarantee data integrity and precision. While the drillhole database provided lacks completeness in terms of quality data compared to the original results, it does encompass the fundamental parameters essential for coal classification and quality estimation.

12.4 COMMENT ON SECTION 12

The QP is of the opinion that the geological database maintained by SGS is fair, reasonable, and acceptable for use in Coal Resource and Coal Reserve estimation and can be used to support mine planning.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 INTRODUCTION

Coal quality has been one of the major subjects for the exploration programs carried out in the Nariin Sukhait region. The earlier exploration program driven by the former Soviet-Mongolian government (Dashkhoral et al., 1992) suggested that the coal was of the GJO and IGJO groups, based on the Soviet standards, equivalent to high-volatile bituminous coals. The exploration programs in 2005 and 2006 for the Coal Mine indicated that the coal is high volatile B to high volatile A bituminous, based on the ASTM standard. The 2007 and 2008 exploration programs continue to indicate that the coals are potentially of coking coal quality at the Sunset Pit. Subsequently, detailed sample analysis by RPM 2012 suggested that the coal resource should be of a mixture of thermal and metallurgical grade.

The coal resources in the Nariin Sukhait region are generally characterized by low ash content, low sulfur content, low inherent moisture and varying Free Swelling Index ("FSI") values. The ash content is typically below 20% on an air-dried basis, indicating that the coal has a relatively low mineral content, which can be advantageous for combustion and processing purposes.

The sulfur content of the coal is approximately 1%, which contributes to a lower emission of sulfur dioxide (SO₂) during combustion, resulting in less environmental and health impacts.

The inherent moisture content of the coal is typically less than 2%. Low moisture content enables less energy required for drying.

The FSI is an important parameter used to assess the coking properties of coal. The FSI measures the swelling behavior of coal when heated in a controlled laboratory test. The FSI values range from non-coking (<2) to coking (> 4.5).

The Coal Mine has commenced production since 2008 in the Sunset Pit and then since 2011 in the Sunrise Pit. Historic production and sales record showed that the coal is literally low-ash 1/3 coking coal in nature by the Chinese National Standards ("GB Standards"). In 2016, the sales record demonstrated that the coal has 13.09% (ad) ash content, with approximately 1%

sulfur and 4.5 FSI. Since then, A Coal has been marketed as 1/3 coking coal in the Chinese Market, as recommended in the previous 2017 Technical Report. In 2023, A Coal accounted for around 56.78% of the total sales volume, indicating that adoption of the GB Standards leads to a higher coal selling price accepted by the Chinese buyers.

13.2 COAL QUALITY

Coal quality of each seam group, confined to the in-pit resource (depth within 300m below ground surface) within the Sunrise Pit, Sunset Pit and B Field Prospect are determined based on SGS's latest resource model, and 2023 coal production and coal products quality and the master coal quality database.

Table 13-1. Coal Quality by Seam Group – Sunrise Pit (Drillhole Database)

<i>Coal Quality</i>	<i>TM</i>	<i>IM</i>	<i>ASH</i>	<i>VM</i>	<i>FC</i>	<i>TS</i>	<i>G_{R.I}</i>	<i>SG</i>	<i>CV</i>
<i>Classifications</i>	<i>%, ad</i>	<i>%, ad</i>	<i>%, ad</i>	<i>%, ad</i>	<i>%, ad</i>	<i>%, ad</i>		<i>g/mm3</i>	<i>cal/g, db</i>
Ash <= 10	8.47	1.07	7.94	34.12	56.97	0.86	64.0	1.34	7,072
10 <Ash <=15	8.16	1.07	12.14	34.19	53.46	1.00	59.0	1.66	6,656
15 Ash <=25	8.04	1.21	19.20	33.80	48.06	1.16	44.0	1.43	5,981
Ash 25	7.53	1.02	31.54	34.16	37.92	1.23	21.0	1.54	4,849

Table 13-2. Coal Quality by Seam Group – Sunset Pit (Drillhole Database)

<i>Coal Quality</i>	<i>TM</i>	<i>IM</i>	<i>ASH</i>	<i>VM</i>	<i>FC</i>	<i>TS</i>	<i>CSN</i>	<i>G_{R.I}</i>	<i>SG</i>	<i>CV</i>
<i>Classifications</i>	<i>%, ad</i>	<i>%, ad</i>	<i>%, ad</i>	<i>%, ad</i>	<i>%, ad</i>	<i>%, ad</i>			<i>g/mm3</i>	<i>cal/g, db</i>
Ash <10%	4.47	1.27	6.36	33.13	59.75	0.68	5.1	42.7	1.32	7,622
10% <Ash <=15%	4.91	1.48	12.2	32.94	53.9	1.05	4.5	40.8	1.37	7,025
15% <Ash <= 25%	5.23	1.56	19.2	31.67	47.93	1.22	3.5	38.5	1.44	6,396

<i>Coal Quality Classifications</i>	<i>TM</i> <i>%, ad</i>	<i>IM</i> <i>%, ad</i>	<i>ASH</i> <i>%, ad</i>	<i>VM</i> <i>%, ad</i>	<i>FC</i> <i>%, ad</i>	<i>TS</i> <i>%, ad</i>	<i>CSN</i>	<i>G_{R.I}</i>	<i>SG</i> <i>g/mm3</i>	<i>CV</i> <i>cal/g, db</i>
Ash >25%	5.02	1.49	31.23	28	39.02	1.11	2.6	9.0	1.57	5,324

Table 13-3. Coal Quality by Seam Group – Sunrise Pit (<300m_Drillhole Database)

<i>Coal Seam</i>	<i>TM</i> <i>%, ad</i>	<i>IM</i> <i>%, ad</i>	<i>ASH</i> <i>%, db</i>	<i>TS</i> <i>%, ad</i>	<i>VM</i> <i>%, db</i>	<i>FC</i> <i>%, ad</i>	<i>CV</i> <i>cal/g, ad</i>	<i>SG</i> <i>g/mm3</i>	<i>G_{R.I}</i>
5L	6.25	0.96	13.81	0.99	33.73	52.50	6,555	1.40	58.9
5U	8.15	1.06	13.11	1.05	33.65	59.27	6,450	1.38	57.4
6L	9.81	1.03	13.96	1.03	35.66	51.11	6,423	1.43	68.0
6U	8.21	1.03	14.10	0.96	33.58	52.53	6,443	1.40	62.2
7L	7.80	1.42	14.03	0.89	35.53	49.70	6,291	1.33	39.6
Average	7.67	1.03	13.37	1.03	33.78	56.81	6,476	1.39	58.0

Table 13-4. Coal Quality by Seam Group – Sunset Pit (<300m_Drillhole Database)

<i>Coal Seam</i>	<i>TM</i> <i>%, ad</i>	<i>IM</i> <i>%, ad</i>	<i>ASH</i> <i>%, ad</i>	<i>VM</i> <i>% ad</i>	<i>FC</i> <i>%, ad</i>	<i>TS</i> <i>%, ad</i>	<i>CSN</i>	<i>G_{R.I}</i>	<i>SG</i> <i>g/mm3</i>	<i>CV</i> <i>cal/g, db</i>
5L	3.54	1.50	11.45	33.49	54.13	0.87	4.7	68.5	1.37	7,095
5U	4.51	1.31	9.69	31.90	57.26	0.75	4.3	66.2	1.35	7,284
S	5.17	2.39	17.77	32.79	47.52	1.26	2.8	32.8	1.44	6,476
9	5.59	1.95	15.57	32.98	50.18	1.46	3.6	42.0	1.39	6,667
10	5.20	1.74	19.25	32.18	47.51	1.38	2.9	0.0	1.45	6,323
Average	4.34	1.60	13.40	32.86	52.66	1.03	4.1	50.2	1.39	6,902

Table 13-5. Coal Quality by Seam Group – B Field (<300m_Drillhole Database)

<i>Seam Group</i>	<i>TM %</i>	<i>IM %, ad</i>	<i>ASH %, db</i>	<i>VM %, daf</i>	<i>TS %, ad</i>	<i>G_{R,I}</i>	<i>SG g/mm³</i>	<i>CV cal/g, db</i>
1	6.88	1.48	16.49	42.72	1.14	58.89	1.33	6,370
2	8.06	1.63	17.96	41.18	1.18	58.68	1.33	6,200
3	8.29	1.53	17.01	42.03	1.41	67.72	1.34	6,390
4	7.71	1.57	17.51	41.47	1.61	65.46	1.37	6,347
6	4.23	1.71	10.33	42.43	1.10	63.94	1.33	6,908
7	3.59	1.73	15.02	41.04	1.23	36.33	1.33	6,355
8	4.34	1.65	15.53	41.48	1.23	60.06	1.33	6,454
9	4.31	1.59	17.07	41.40	1.26	47.33	1.34	6,301
10	4.17	1.58	19.14	40.81	1.43	33.27	1.37	6,096
Average	5.73	1.61	16.23	41.62	1.29	54.63	1.34	6,380

BAW understands that all coal products are currently exported to the PRC. Hence, coal quality tests are performed in accordance with the GB Standards. Typical measurements of coking properties include the maximum thickness of plastic layer (Y mm, GB/T 479), caking index (G_{R,I}, GB/T 5447), and volatile matter (V_{daf} %, GB/T 212) while the crucible swelling number (CSN, GB/T 5448) which is equivalent to the free swelling index (FSI) according to the American Society for Testing and Materials ("ASTM") is not widely applied as shown in the drillhole database.

Therefore, according to the Chinese classification of coals (GB/T 5751), the coal seams of the Sunrise Pit and Sunset Pit are classified as 1/3 coking coal, gas coal and 1/2 medium caking coal as summarized in Table 13-6.

<i>Seam Group</i>	<i>TM %</i>	<i>IM %, ad</i>	<i>ASH %, db</i>	<i>VM %, daf</i>	<i>TS %, ad</i>	<i>G_{R,I}</i>	<i>SG g/mm³</i>	<i>CV cal/g, db</i>
1	6.88	1.48	16.49	42.72	1.14	58.89	1.33	6,370
2	8.06	1.63	17.96	41.18	1.18	58.68	1.33	6,200
3	8.29	1.53	17.01	42.03	1.41	67.72	1.34	6,390
4	7.71	1.57	17.51	41.47	1.61	65.46	1.37	6,347
6	4.23	1.71	10.33	42.43	1.10	63.94	1.33	6,908

7	3.59	1.73	15.02	41.04	1.23	36.33	1.33	6,355
8	4.34	1.65	15.53	41.48	1.23	60.06	1.33	6,454
9	4.31	1.59	17.07	41.40	1.26	47.33	1.34	6,301
10	4.17	1.58	19.14	40.81	1.43	33.27	1.37	6,096
Average	5.73	1.61	16.23	41.62	1.29	54.63	1.34	6,380

BAW understands that all coal products are currently exported to the PRC. Hence, coal quality tests are performed pursuant with the Chinese classification of coals ("GB/T 5751"). Accordingly, the coal seams of the Sunrise Pit, Sunset Pit and B Field Prospect are classified as 1/3 coking coal, gas coal and 1/2 medium caking coal.

Table 13-6. 2023 Coal Production /Coal Products Quality Specification

<i>Coal Products</i>	<i>Coal Product Specification</i>							<i>Coal Product Classification GB/T 5751</i>
	<i>Exported Coal Product Metric Ton</i>	<i>Total Moisture %, db</i>	<i>Ash %, db</i>	<i>Sulfur %, db</i>	<i>Calorific Value cal/g</i>	<i>Volatile Matter %, daf</i>	<i>G_{R,I}</i>	
A Coal	2,052,894	2.89	8.01	0.41	7,285	35.61	74.6	1/3 Coking Coal
A Coal (-)	29,106	3.25	15.02	1.20	6,612	37.95	58.5	Gas Coal
B Coal	530,945	3.49	12.95	0.62	4,508	30.29	42.4	1/2 Medium Caking Coal
B Coal (-)	648,621	3.77	22.66	0.79	5,826	40.70	33.5	1/2 Medium Caking Coal
Processed A	221,951	2.95	11.88	0.94	6,713	39.03	72.0	1/3 Coking Coal
Processed B	12,470	5.97	16.26	1.34	5,967	35.99	61.2	Gas Coal
F	49,909	3.77	20.14	1.17	6,239	40.26	17.7	Weak Caking Coal

Caking Index (G_{R,I}) tests conducted on various drillhole samples generally reveal the lowest sampling rate in comparison to other coal quality test, regardless of whether it pertains to the

Sunrise Pit, Sunset Pit or B Field. However, a thorough examination of coking properties reveals a strong correlation with the ash content. When the ash content does not exceed 9%, the caking index serves as a reliable indicator for classifying the coking properties of A Coal. This classification is achieved by incorporating the drillhole database into the master coal quality database, and the detailed correlations are analyzed in Figure 13-1.

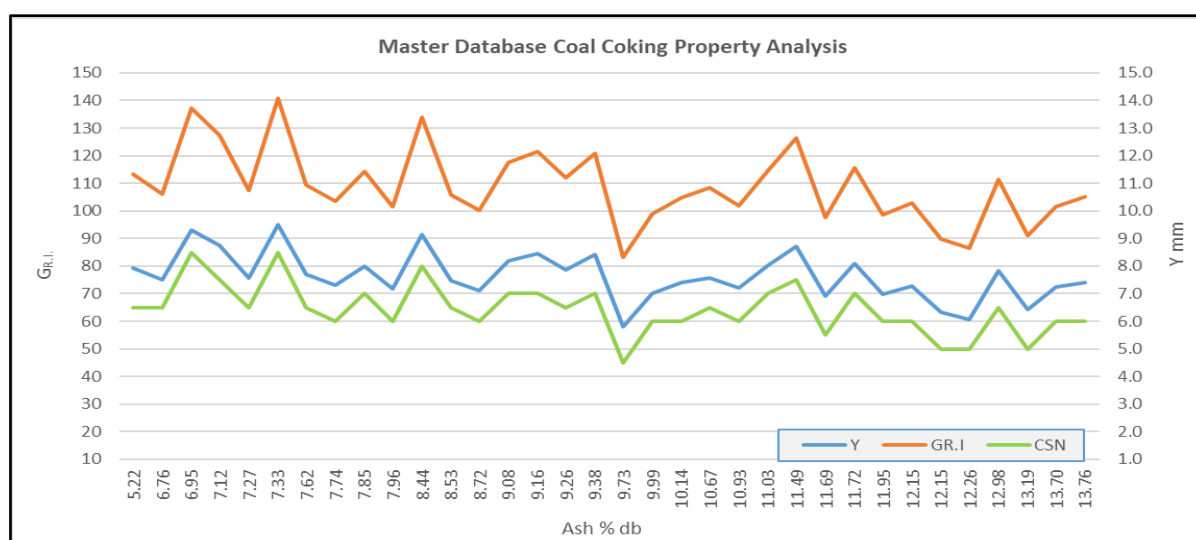


Figure 13-1. Correlation of the Ash content and Caking Index

Ultimate Analysis and Ash Fusibility

Ultimate analysis focuses on Carbon (C), Hydrogen (H), Nitrogen (N), and Oxygen (O). Mainly, the carbon and hydrogen in coal occur in the complex organic compound making up coal while ash fusibility presents the behavior of coal ash in combustion. The fusion characteristics of the ash are described as the initial deformation temperature (T_1), softening temperature (T_2), and flow temperature (T_3). By the GB standard, the coal ash of the Ovoot Tolgoi region, is classified as Medium Softening Temperature and Medium Flow Temperature.

Table 13-7. Coal Ultimate Analysis and Ash Fusibility

<i>Items</i>	<i>Ash %, db</i>	<i>Ultimate Analysis, % daf</i>				<i>Ash Fusibility, °C</i>		
		<i>C</i>	<i>H</i>	<i>N</i>	<i>O₂</i>	<i>t₁</i>	<i>t₂</i>	<i>t₃</i>
Average	16.42	68.50	4.28	1.07	7.92	1,2985	1,294	1,353
Max.	41.47	81.98	5.03	9.72	11.33	1,501	1,501	1,501
Min.	5.41	46.01	2.70	0.62	4.80	1,207	1,211	1,251
# of Samples	177	177	177	177	177	177	177	177

Trace Elements

Trace elements have gained attention in the 2021 and 2023 drilling program, specifically with regards to 59 samples for Fluorine, 79 samples for Mercury, 81 samples for Phosphorus, Chlorine, and Arsenic. The analysis results are presented in Table 13-8.

Table 13-8. Trace Elements of Coal

<i>Analytic Item</i>	<i>Caking Index</i>	<i>Maximum Plastic Thickness</i>	<i>Fluorine</i>	<i>Mercury</i>	<i>Phosphorus</i>	<i>Chlorine</i>	<i>Arsenic</i>
Symbol	G _{R,I}	Y	F	Hg	Pb	CL	As
Base	ad	ad	ad	ad	ad	ad	ad
Unit	-	mm	ppm	%	%	%	ppm
Condition	Ash < 10%						
Average	70.29	10.00	96.31	0.04	0.04	0.04	9.37
# Sample	275.00	106.00	59.00	79.00	81.00	81.00	81.00

Trace elements are critical to steel making and environmental protection when coal is turned into other materials or serves as an energy source.

Washability

BAW understands that no washability test was performed on the core samples during recent drill programs from 2021 to 2023. In 2023, a total of 284,330 tonnes of coal was processed, accounting for 8.02% of the total annual coal production. This indicates that more than 90% of coal products were raw coal. Washability of coal seams is summarized in Table 13-9.

Table 13-9. Washability of Coal Seams

<i>Float S.G.</i>	<i>5U</i>		<i>5L</i>		<i>6L</i>		<i>8</i>		<i>9</i>	
	<i>Ash</i>	<i>Yield</i>	<i>Ash</i>	<i>Yield</i>	<i>Ash</i>	<i>Yield</i>	<i>Ash</i>	<i>Yield</i>	<i>Ash</i>	<i>Yield</i>
1.40	8.78	86.61	8.06	79.97	7.98	95.35	8.09	64.50	8.41	74.83
1.50	9.00	90.45	8.46	86.98	8.10	97.15	9.98	76.70	8.68	77.50
1.60	9.30	92.91	8.89	90.16	8.26	98.64	11.11	81.70	9.63	83.00

As shown above, at 1.40 S.G., all the coal seams can be classified as ultra-low ash coal (<10%), while the clean coal yield varies within the range from 64.50% (8) to 95.35% (6L). Averaging the results for 5U and 5L, 8.42% ash retrieves a yield of 83.24%. It is known that the clean coal yield depends on dilution of the coal seams. The drillhole database only indicates basic clean coal quality, and the yield and washability will be subject to dilution and geological conditions of mining faces.

The proportion of the Premium Coal, Standard Coal and Wash Feed of each pit are summarized in Figure 13-2 and Figure 13-3.

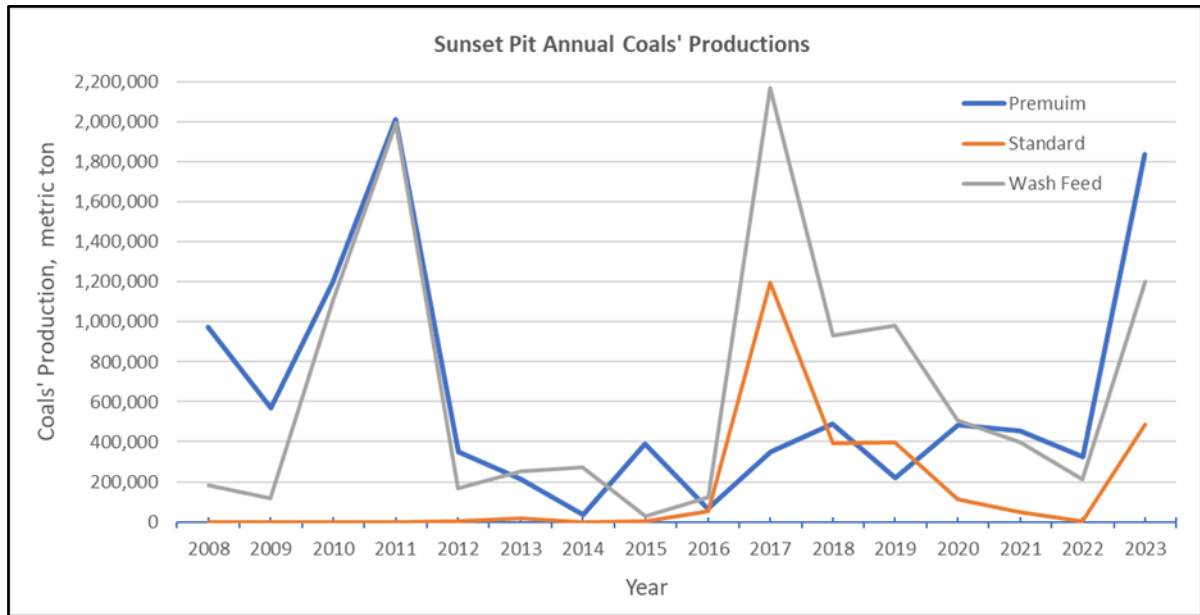


Figure 13-2. Annual Coal Production of the Sunset Pit (2008-2023)

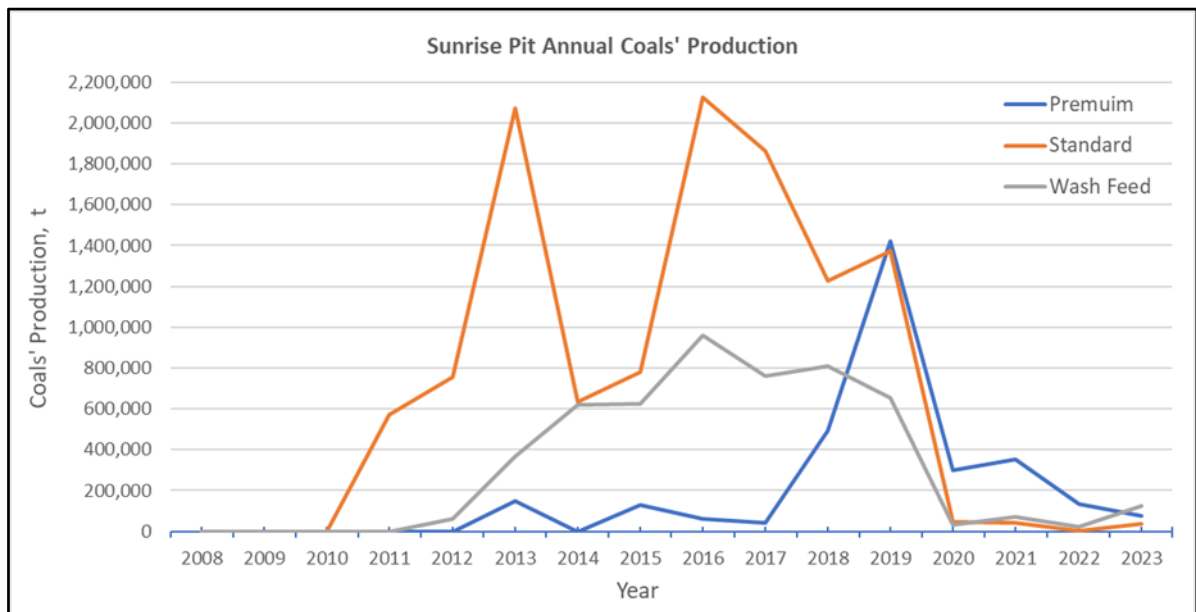


Figure 13-3. Annual Coal Production of the Sunrise Pit (2010-2023)

13.3 SAMPLING

The majority of coal quality data were generally acquired from core samples while a few RC samples were collected during the exploration programs. There is a total of 613 drillholes completed for the Coal Mine among which 182 drillholes are coal quality holes as summarized

in Table 13-10.

Table 13-10. Summary of Coal Quality Holes (up to 2023)

<i>Pits</i>	<i>Total Number of Drillholes</i>	<i>Total Number of Cored Holes</i>	<i>Number of Coal Quality Holes</i>	<i>Percentage of Coal Quality Holes</i>
Sunrise	288	98	72	25
Sunset	305	148	110	34
B Field	80	21	18	23
Total	673	267	200	30

RC samples were taken from Seam No. 7, No. 6U and No. 6L of the Sunrise Pit. These seam groups are presumably related to Seam No. 8, No. 9, and No.10 of the Sunset Pit, respectively. ROM coal samples were collected by DMCL from current working faces at the mine site in 2017. DMCL has requested SGS to collect samples of such kind from selected seam groups. The collected samples were then sent to ALS Mongolia located in Ulaanbaatar for washability test which comprises of determination of coal quality, sizing, float-sink, and flotation. ALS Mongolia has demonstrated to DMCL that the analytical protocols adopted by ALS Mongolia are essentially the same as other SGS laboratories globally.

BAW did not perform any validation sampling to compare the laboratory results obtained by SGS from the 2023 drilling activities. The QP considers this omission as non-material due to the prolonged exposure of the coal seams, which would likely yield different results on most of the quality parameters. The QP assessed the analytical procedures employed by the laboratories utilized by SGS and concluded that they were appropriate for the specific deposit under consideration.

13.4 TESTING

The collected coal samples were sent to accredited laboratories for analysis using a standard analytical package that is commonly used and recognized in the coal mining industry. Laboratories used during the past exploration programs include SGS Denver in the US, an ISO-9000 certified and NQA accredited laboratory, SGS China in Tianjin, an ISO-17025 certified

and China National Accreditation Service for Conformity Assessment accredited laboratory, and SGS on-site ISO/IEC 17025 certified laboratory. In January 2023, China Certification & Inspection Group Fujian Co., Ltd. (CCIC) established an onsite laboratory which replaced SGS laboratory. CCIC currently holds ISO/IEC 17020 and ISO/IEC 17025 certifications, accredited by China National Accreditation Service for Conformity Assessment and certificated by Certification and Accreditation Administration of the PRC.

Coal samples were submitted for the proximate analysis, ultimate analysis, ash analysis, thermal analysis, sulphur analysis and metallurgical test. The detail of each test is described below.

Test items of proximate analysis include:

- Moisture
- Ash
- Volatile matter
- Fixed carbon
- Thermal value

Test items of ultimate analysis include:

- Carbon
- Hydrogen
- Nitrogen
- Sulphur
- Oxygen

Ash analysis is a method used to evaluate and characterize the properties of coal ash residues. It involves determining the inorganic and mineral residues that remain after complete combustion of the coal. The test items typically included in ash analysis are:

- Al_2O_3
- BaO
- CaO
- Fe_2O_3

- K₂O
- MgO
- MnO
- NaO
- SO₃
- SiO₃
- SrO
- TiO₂
- ZnO

Test items of sulphur analysis include:

- Sulphate
- Pyrite
- Organic

Test items of metallurgical test include:

- Gieseler plastometer
- Audibert – Arnu dilatometer
- Reactive maceral analysis (petrography)
- Phosphorous content (P %)
- Free Swelling Index (FSI) or Crucible Swelling Number (CSN)
- Caking Index (G Index)
- Trace element analyses (ppm)
- Hardgrove grindability index (HGI)
- Sapozhnikov Plastometer

Hardgrove Grindability Index (HGI) determination has been conducted in order to describe the coal handling characteristics. Trace element analyses expressed as parts per million (ppm) is used to ascertain the potential for release of deleterious elements following combustion of coal.

14. MINERAL RESOURCE ESTIMATES

14.1 INTRODUCTION

Between 2011 and 2016, the Resources of the Coal Mine was classified and estimated by SGS. Additionally, independent verification and estimation were carried out by RPM, following the requirements outlined in NI 43-101 and the relevant sections of the GSC 88-21.

Resource and Reserve estimates were then performed by RPM and were documented in "Coal Geology and Resources and Reserves, Ovoot Tolgoi Deposit, Mongolia" dated March 2012 (2012 Technical Report) following the completion of a Preliminary Feasibility Study ("PFS") prepared for the Sunset and Sunrise Pits. Subsequently, RPM updated the resource estimate for the Sunset and Sunrise Pits in "Coal Geology and Resources, Ovoot Tolgoi Deposit, Mongolia" in May 2016 (2016 Technical Report) which led to a substantial reduction of the resources in response to declining coal price.

In 2017, DMCL updated the Resource estimate, Reserve estimate, long-term mine plan and production schedule substantially for the Sunset and Sunrise Pits in the "NI 43-101 Technical Report for the Ovoot Tolgoi Coal Mine, SouthGobi Province, Mongolia" in May 2017 (2017 Technical Report).

The Resource estimate for the B Field Prospect is a maiden NI 43-101 compliant resource.

The classification, reporting and estimation of the Resource for the Coal Mine as presented in this TR, are in accordance with the requirements stipulated in NI 43-101 and GSC 88-21.

14.2 RESOURCE DEFINITIONS

In compliance with the requirements of NI 43-101, the definition of Resource is referenced to "CIM Definition Standards on Mineral Resources and Reserves (CIMDS)" adopted by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") on May 10, 2014. This standard specifies that additional guidelines for statements of Resources and Reserves are

outlined in the GSC 88-21. The GSC 88-21 primarily focuses on describing the data point density necessary to estimate Measured, Indicated, and Inferred Resources based on different types of coal deposit geology.

When estimating coal resources and reserves, it is crucial to consider the specific geological characteristics of the deposits and determine the appropriate data density. The CIMDS and the guidelines provided in the GSC 88-21 play a significant role in ensuring a consistent and reliable classification and reporting of coal resources and reserves. The combination of the CIMDS and the guidelines set forth in the GSC 88-21 ensures that coal resources and reserves are classified and reported in a consistent manner, considering the specific geological characteristics of the deposits and the necessary data density for reliable estimations.

Their definitions are summarized below.

- *Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.*
- *A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated, or interpreted from specific geological evidence and knowledge, including sampling.*
- *An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.*
- *An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.*

- *A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.*

The framework of the resource estimation is guided by GSC 88-21 as to the assurance of their existence into one of three categories: Measured, Indicated and Inferred. This categorization is based on the criteria for coal found in Geology Type "Complex" and "Severe" conditions, as shown in Table 14-1 and Table 14-2.

Table 14-1. Assurance of Existence for Coals of Complex Geology Type

<i>Criteria</i>	<i>Assurance of Existence Category</i>		
	<i>Measured</i>	<i>Indicated</i>	<i>Inferred</i>
Cross-section spacing (m)	150	300	600
Minimum # data points per section	3	3	3
Mean data point spacing (m)	100	200	400
Maximum data point spacing (m)	200	400	800

Table 14-2. Assurance of Existence for Coals of Severe Geology Type

<i>Criteria</i>	<i>Assurance of Existence Category</i>		
	<i>Measured</i>	<i>Indicated</i>	<i>Inferred</i>
Cross-section spacing (m)	75	150	300
Minimum # data points per section	5	5	5
Mean data point spacing (m)	50	100	200
Maximum data point spacing (m)	100	200	400

14.3 RESOURCE MODEL

BAW verified the database, geological models and parameters used for resource estimation for the Sunset Pit, Sunrise Pit and B Field Prospect respectively. The solids and block models were

initially created by MBGS in 2011 using 3D modelling software. Subsequently, since 2015 up to present day, SGS's personnel, under the supervision of RPM, took over the responsibility of working on the models using the same software. The update of the resource model includes the latest exploration drilling result and coal quality results. In order to verify the 2023 geological models provided by SGS, BAW supervised the recreation of block models for the Sunset Pit, Sunrise Pit and B Field Prospect. Graphical outputs, including contours and sections were created using 3D modelling software for comparison. The comparison was good in general, allowing for differing modelling techniques. Nevertheless, it should be emphasized that no single geological model can completely reflect the complex geological characteristics of any deposit.

BAW's commentaries in relation to the resource model are summarized below.

- The latest resource model indicated that all mined-out resources of coal seams have been reasonably depleted from the resource estimate.
- BAW's estimation result is highly comparable to that produced by SGS. We are of the opinion that the resource estimation in terms of tonnage prepared by SGS is fair, reasonable, and representative of the coal deposits.
- BAW reviewed the resource category classification and found out that the drillhole spacing for Measured, Indicated and Inferred is conformable with the Severe and Complex geology-type requirement specifically defined in the GSC 88-21. BAW holds the opinion that the Measured and Indicated Resources classified in the SGS resource model are fair, reasonable, and conformable with the industry practice.
- BAW is of the opinion that the overall resource model prepared by SGS can be reasonably used for long-term mine planning purposes in accordance with the NI 43-101 requirements.

14.4 RESOURCE ESTIMATION

The Resources of the Coal Mine has been estimated as of December 31, 2023 using the database and resource models provided by SGS as shown in Table 14-3, Table 14-4 and Table 14-4. At

present, there are no resources estimated for the C Field Prospect as further drilling is required.

The key assumptions used for the resource estimation are:

- Minimum coal seam thickness = 0.6 m.
- Maximum coal parting = 0.3 m.
- In-pit Resources are constrained to a depth of 300 m below surface and the ultimate pit design used in the 2017 Technical Report.
- Surface Resources are constrained to a depth of 300 m below surface and are inclusive of in-pit Resources.
- Underground Resources are constrained to depth of 300 m - 500 m below surface.
- Volumes are converted to tonnages using laboratory relative density analytical results converted to an estimated in-situ basis.
- Resource is constrained to SGS's concession only.
- Resource is estimated on an in-situ basis (i.e. as an in-situ tonnage and not adjusted for mining recovery).
- Resource is depleted by mined out tonnage.
- The Measured and Indicated Resources are inclusive of those Resources modified to produce the Reserves, i.e. Reserves are not additional to Resources.
- Resource is estimated based on the survey data made available as of December 31, 2023, for the Sunrise and Sunset Pits.
- The estimation of the Resources may be materially affected by legal title, environmental permitting, socio-political, taxation, marketing, and other related issues and therefore, Resources which are not defined as Reserves may not demonstrate economic viability.
- The quantity and quality of the Inferred Resources in this estimation is uncertain in nature. Further exploration in the future does not guarantee the upgrading of result in to Indicated and Measured Resources category.
- Totals may not add up due to rounding.

In this TR, BAW divided the resource estimation into in-pit resource, surface resource and underground resource. The in-pit resource is a portion of the surface resource (depth <300 m below surface) based on the ultimate pit design provided by SGS. The underground resource

covers a depth from 300 m to 500 m below surface. The Resource estimated for the Coal Mine as of December 31, 2023 is tabulated in Table 14-3, Table 14-4 and Table 14-5.

Table 14-3. In-Pit Resource Estimate of the Coal Mine as of December 31, 2023

<i>Coal Field</i>	<i>Seam Group</i>	<i>In-Pit Resource (Mt)</i>			
		<i>Measured</i>	<i>Indicated</i>	<i>Measured+Indicated</i>	<i>Inferred</i>
Sunrise Pit	7	0.37	0.28	0.65	0.71
	6	0.34	1.03	1.37	0.52
	5U	17.03	7.74	24.77	1.02
	5L	10.15	2.13	12.28	0.54
	4	0.76	0.83	1.59	0.08
	Sub-total	28.65	12.01	40.66	2.87
Sunset Pit	10	7.55	0.26	7.81	0.00
	9	4.72	0.37	5.09	0.00
	8	1.04	0.09	1.13	0.00
	5U	16.03	0.10	16.13	0.00
	5L	13.33	0.33	13.66	0.00
	Sub-total	42.67	1.15	43.82	0.00
B Field Prospect	10	0.26	0.54	0.80	0.90
	9	0.31	1.11	1.42	1.18
	8	0.10	0.28	0.38	0.24
	7	0.00	0.00	0.00	0.00
	6	0.00	0.00	0.00	0.00
	Sub-total	0.67	1.93	2.60	2.32
	Grand Total	72.00	15.08	87.08	5.19

Table 14-4. Surface Resource Estimate of the Coal Mine as of December 31, 2023

<i>Coal Field</i>	<i>Seam Group</i>	<i>Surface Resource (Mt)</i>			
		<i>Measured</i>	<i>Indicated</i>	<i>Measured+Indicated</i>	<i>Inferred</i>

Sunrise Pit (depth <300m)	7	1.00	1.77	2.77	4.68
	6	2.17	3.04	5.21	4.07
	5U	34.13	31.33	65.46	26.49
	5L	16.16	4.98	21.14	1.36
	4	1.52	1.84	3.36	1.30
	Sub-total	54.98	42.96	97.94	37.90
Sunset Pit (depth <300m)	10	21.43	3.24	24.67	1.24
	9	10.54	3.50	14.04	0.87
	8	1.84	2.07	3.91	0.61
	5U	23.19	1.36	24.55	0.06
	5L	20.08	1.69	21.77	0.21
	Sub-total	77.08	11.86	88.94	2.99
B Field Prospect (depth <300m)	10	0.67	1.64	2.31	5.21
	9	0.88	2.63	3.51	6.71
	8	0.67	1.50	2.17	3.48
	7	0.26	2.01	2.27	5.87
	6	0.00	0.18	0.18	0.21
	Sub-total	2.48	7.96	10.44	21.48
	Grand Total	134.56	62.78	197.34	62.38

Table 14-5. Underground Resource Estimate of the Coal Mine as of December 31, 2023

Coal Field	Seam Group	Underground Resource (Mt)			
		Measured	Indicated	Measured+Indicated	Inferred
Sunrise Pit (depth from 300m to 500m)	5U	3.29	8.78	12.07	17.2
	5L	6.19	13.76	19.95	27.93
	4	0.98	2.66	3.64	4.06
	Sub-total	10.46	25.2	35.66	49.19
Sunset Pit (depth from	10	17.76	3.95	21.71	2.85
	9	8.16	1.40	9.56	1.16

300m to 500m)	8	0.28	0.63	0.91	1.16
	5U	25.54	4.43	29.97	2.74
	5L	18.29	5.33	23.62	2.84
	Sub-total	70.03	15.74	85.77	10.75
B Field Prospect (depth from 300m to 500m)	10	0.00	1.07	1.07	1.07
	9	0.00	0.51	0.51	0.51
	8	0.00	0.70	0.70	0.70
	7	0.00	1.43	1.43	1.47
	6	0.00	0.14	0.14	0.14
	Sub-total	0.00	3.85	3.85	3.89
Grand Total		80.49	44.79	125.27	63.83

Table 14-6. Surface and Underground Resource Estimate of the Coal Mine as of December 31, 2023

Coal Field	Surface and Underground Resource (Mt)				
		Measured	Indicated	Measured+Indicated	Inferred
Sunrise Pit	Surface	54.98	42.96	97.94	37.90
	Underground	10.46	25.20	35.66	49.19
Sunset Pit	Surface	77.08	11.86	88.94	2.99
	Underground	70.03	15.74	85.77	10.75
B Field Prospect	Surface	2.48	7.96	10.44	21.48
	Underground	0.00	3.85	3.85	3.89
Grand Total		215.03	107.57	322.60	126.20

According to the initial interpretation by SGS's resource team, there were lower Seam Nos. 4, 3, 2 and 1 and upper Seam Nos. 10, 9, 8, 7, and 6. However, the subsequent stratigraphic interpretation by EAMC in 2022 suggests that the lower coal seams are equivalent to the upper coal seams on the opposite side of an interpreted fault. Therefore, Seam 4 corresponds to Seam 10, Seam 3 corresponds to Seam 9, Seam 2 corresponds to Seam 8, and Seam 1 corresponds to

Seam 7. Consequently, the resources of these coal seams were consolidated, and the upper Seam Nos. 10, 9, 8, 7, and 6 were preserved and documented. The QP concurs with this interpretation as it aligns better with the geological context, considering the adjacent stratigraphic sequence of the Coal Mine. Importantly, such revised seam numbering has a minimal impact on the overall resources and the eventual extraction of these resources.

A sample plan-view maps of resource estimation and classification of Seam Nos. 4, 5L, 5U, 6 and 7 of the Sunrise Pit are shown in Figure 28C-1 to Figure 28C-5 in Appendix C – Detailed Coal Seam Resource Classification.

A sample plan-view maps of the resource estimation and classification of Seam Nos. 5L, 5U, 8, 9, and 10 of the Sunset Pit are shown in Figure 28C-6 to Figure 28C-10 in Appendix C – Detailed Coal Seam Resource Classification.

A sample plan-view maps of the resource estimation and classification of Seam Nos. 6, 7, 8, 9 and 10 of the B Field are shown in Figure 28C-11 to Figure 28C-15 in Appendix C – Detailed Coal Seam Resource Classification.

14.5 DISCUSSION

BAW has thoroughly reviewed the protocols and methods used at each stage of the exploration work. Based on this review, BAW believes that the applied methods generally align with the industry practice. BAW is of the opinion that the overall geological database is fair, reasonable, and conformable with the industry practice and appropriate for subsequent use in Resource and Reserve estimation in accordance with the requirement of the NI 43-101 reporting standard.

Considering the continuous mining depletion and new drillhole information obtained in the past few years, BAW is of the opinion that the resource estimation published in 2017 for the Coal Mine is highly comparable to the total resource estimation presented in this TR. However, individual seam resources of Seam Nos. 10, 9 and 8 in the Sunset Pit appear to be different from the 2017 resource estimation due to re-interpretation by SGS as mining advances and new drilling information becomes available. In addition, in-pit resource was established in this TR

to reflect the resource within the ultimate pit design. The in-pit resource is a subset of the surface resource below 300 m depth from the surface which encompasses resource beyond the ultimate pit limit.

14.6 FACTORS THAT MAY AFFECT COAL RESOURCE ESTIMATE

There are certain areas of uncertainty that have the potential to significantly impact the estimates of coal Resources. These areas include:

- **Changes to long-term coal price assumptions:** The estimation of coal Resources is influenced by assumptions regarding future coal prices. If there are significant changes in long-term coal price projections, it could have a material impact on the economic viability and classification of the resources.
- **Changes in geological interpretations:** The size, shape, and distribution of the interpreted coal seams and waste materials play a crucial role in estimating coal Resources. Any revisions or changes in the geological interpretations, such as adjustments to the understanding of the deposit's geology, can impact the estimated quantity and quality of the resources.
- **Changes in local interpretations:** Local interpretations of seam geometry, fault geometry, and seam continuity can evolve as more data becomes available or through improved understanding of the geological conditions. These changes in interpretation can influence the estimation of coal Resources by altering the size, shape, and distribution of the coal deposits.
- **Changes to input assumptions for open pit outlines:** The estimation of coal Resources often involves using open pit outlines to constrain the estimate. Any modifications to the input assumptions, such as slope angles, pit designs, or mining constraints, can affect the classification and quantity of the estimated resources.
- **Changes to environmental, permitting, and social license assumptions:** Factors related to environmental regulations, permitting requirements, and social acceptance can play a significant role in determining the economic viability and feasibility of coal mining projects. Any changes in these assumptions, such as stricter

environmental standards or evolving social license considerations, can impact the estimation of Coal Resources.

14.7 COMMENT ON SECTION 14

The QP confirms that the estimation of coal Resources was conducted using industry-accepted practices and adheres to the CIMDS on Mineral Resources and Reserves. The resource estimates are based on assumptions related to open pit and underground mining. It is important to note that coal Resources are forward-looking statements and are subject to potential variations. The actual results may differ from the estimates due to various factors.

The QP asserts that there are no other significant environmental, legal, title, taxation, socio-economic, marketing, political, or any other relevant factors known to him that would materially impact the estimation of Resources beyond what has been discussed in the TR.

There is potential for upside in the Coal Mine if more exploration efforts are made to convert part of or all of the Measured and Indicated Resources into Reserves. Additionally, if the Inferred Resources can be upgraded to higher-confidence categories and subsequently converted into the Reserves, it could further enhance the LOM. These possibilities highlight the opportunity for further exploration and evaluation to increase the confidence level and economic viability of the coal deposits.

Similarly, additional drillholes are needed in order to confirm coal continuity and coal quality along the E-W direction of the B Field Prospect. This step will enhance the confidence level of resource categorization.

15. MINERAL RESERVE ESTIMATES

15.1 INTRODUCTION

Between 2011 to 2016, the Reserve of the Coal Mine was classified and estimated independently by RPM in accordance with the requirements set out by NI 43-101 and the GSC 88-21. Resource and Reserve estimate was previously reported in "Coal Geology and Resources and Reserves, Ovoot Tolgoi Deposit, Mongolia", prepared by RPM (formerly as MMC) on March 19, 2012, following the completion of a Preliminary Feasibility Study (PFS) for the Sunset and Sunrise Pits. Subsequently, in 2016, RPM revised the Resource and Reserve estimates because of the declining coal prices.

In 2017, DMCL updated the Resource estimate, Reserve estimate, long-term mine plan and production schedule substantially for the Sunset and Sunrise Pits which were documented in the 2017 Technical Report.

The classification, reporting and estimation of Reserve for the Coal Mine presented in this TR were also made in conformance with the requirements of the NI 43-101 and applicable portions of the GSC 88-21.

15.2 RESERVE DEFINITIONS

In accordance with the requirements of NI 43-101, the definition of Reserve is referenced to CIMDS adopted by CIM on May 10, 2014. Their definitions are summarized below.

- *Mineral Reserves are sub-divided in order of increasing confidence into Probable Mineral Reserves and Proven Mineral Reserves. A Probable Mineral Reserve has a lower level of confidence than a Proven Mineral Reserve.*
- *A Mineral Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying*

Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

- *A Probable Mineral Reserve is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource.*
- *A Proven Mineral Reserve is the economically mineable part of a Measured Mineral Resource and Inferred Mineral Resources are always additional to Mineral Reserves.*

Except as stated herein, BAW is not aware of any modifying factors exogenous to mining engineering considerations (i.e. competing interests, environmental concerns, socio-economic issues, legal issues, etc.) that would be of sufficient magnitude to warrant excluding reserve tonnage below design limitations or reducing reserve classification (confidence) levels from proven to probable or otherwise.

15.3 ESTIMATION PROCEDURES AND PARAMETERS

The resource models were used for the Resource estimation and Reserve estimation. BAW's estimation of Reserve generally involves the consideration of the Resource estimation with its associated resource model and the "Modifying Factors" including mine planning, historic production, reconciliation of resource estimation, coal processing, infrastructures, economic, marketing, legal, environmental, social, and governmental factors. The complex nature of the coal seams was modelled from exploration drillhole data. Detailed in-pit mapping of mining faces provides suitable information for short term mine planning.

The procedures adopted by BAW to estimate Reserve for the Coal Mine are discussed as follows:

- Review of the resource model generated previously by SGS including seam thickness, stone parting thickness, relative density, raw and product qualities, coal quality (ash, total sulphur, volatile matter, moisture, and specific energy).
- Review of feasibility studies and engineering design studies (if any) including the operating description, LOM production plan and capital costs.
- Review of the mining method, extraction operation, and ultimate pit design.

- BAW updated the production schedule with a capacity of 4.5 mtpa of ROM coal according to the recent actual production record.
- Mining recovery and mining dilution at working face were applied to determine raw coal tonnages for each coal seam; to verify the mining recovery and dilution with historical recoveries and mine plans to ensure consistency (where possible) and appropriateness.
- Review of the mining license to ensure the Reserve estimates are constrained within the mining license or expansion areas.
- Review of mined-out areas which should be depleted from the Reserve estimates.
- An economic model was generated to incorporate operating and capital costs and revenue. BAW reviewed the operating and capital cost estimates prior to applying them in the economic model. Additional capital costs were included in the economic model to allow for sustaining capital over the LOM.

15.4 RESERVE ESTIMATION

The Reserves of the Coal Mine was estimated as of December 31, 2023, based on the resource model provided by SGS and the long-term mine plan completed for the Sunset and Sunrise Pits. No Reserves were estimated for the B Field Prospect at this time in the absence of mine planning and detailed technical studies. The key assumptions used to for the Reserve estimation are:

- Measured and Indicated Resources are inclusive of those Mineral Resources modified to produce the Reserves.
- Reserves do not include any Inferred Resources, including those that have been treated as waste (i.e. its mining costs have been covered but no revenue has been assumed for the Inferred Resources).
- The mining method selected is a truck-and-shovel open pit terrace mining operation.
- Cut-off ash content for raw coal is assumed to be 50%.
- A mining recovery factor of 95% and a mining dilution factor of 2.5% are applied in the Reserve estimates.
- The pits and thus Reserves are designed to 300 m below the original ground surface.

- Reserves are constrained to SGS's concession only although the open pit limits will extend across the lease boundary into the adjacent MAK's concession. SGS and MAK have an agreement in place that allows SGS to strip off the overburden in MAK's concession. Coal within the pits within MAK's concession has been treated with no revenue and no cost whereas the waste within the pits and MAK's concession will be stripped off at the cost of SGS.
- Reserves are estimated to account for coal and waste that was mined as of December 31, 2023.
- Coal price adopted in the Reserve estimates is US \$90/t.
- Totals may not add up due to rounding.

The Reserve estimated for the Coal Mine as of December 31, 2023, is tabulated in Table 15-1.

Table 15-1. Reserve Estimate of the Coal Mine as of December 31, 2023

<i>Pit</i>	<i>Seam Group</i>	<i>Reserve (Mt)</i>		
		<i>Proven</i>	<i>Probable</i>	<i>Total</i>
Sunrise Pit	7	0.36	0.28	0.64
	6	0.33	1.00	1.33
	5U	16.58	7.53	24.12
	5L	9.89	2.07	11.96
	4	0.74	0.81	1.55
	Sub-total	27.90	11.69	39.59
Sunset Pit	11	0.00	0.00	0.00
	10	7.35	0.25	7.60
	9	4.60	0.36	4.95
	8	1.02	0.09	1.10
	5U	15.61	0.10	15.71
	5L	12.98	0.32	13.31
	Sub-total	41.56	1.12	42.68

<i>Pit</i>	<i>Seam Group</i>	<i>Reserve (Mt)</i>		
		<i>Proven</i>	<i>Probable</i>	<i>Total</i>
	Grand Total	69.46	12.81	82.26

15.5 DISCUSSION

SQR previously reported 175.7 Mt of Proven and Probable Reserves of the Coal Mine prepared by RPM in the 2012 Technical Report. Subsequently, the total Resources estimated for the Coal Mine in the 2016 Technical Report had significantly decreased from the previous estimate in the 2012 Technical Report, principally due to 1) the exclusion of previously estimated underground Resources, and 2) the downgrade of the resource category. In response to the declining coal prices and weak coal transaction conditions in the PRC, the Resources of the Coal Mine was not considered to be reasonably economically viable in the 2016 Technical Report and thus, SQR was not in the position to disclose Reserve in the 2016 Technical Report.

In late 2016, SQR commissioned DMCL to commence a comprehensive review of all relevant information including technical data, mining strategy, pit optimization, mine plan, production scheduling, coal processing strategy, sales strategy, coal prices and recovering coal transaction conditions, to update its reserve estimate and prepare an updated long-term mine plan. The reserve estimate presented in the 2017 Technical Report is materially different from the previous estimate made in the 2016 Technical Report because the Geology Type classification was upgraded from previously "Severe" to "Complex". This classification upgrade subsequently resulted in a revised requirement for the spatial distribution of geological data, leading to a distinct resource categorization based on the guidelines outlined in GSC 88-21. Resource categories are re-classified accordingly such that a portion of the Indicated and Inferred Resources can be reclassified as Measured and Indicated Resources, respectively. BAW holds the opinion that the Geology Type classification should be the "Complex" category for the Coal Mine.

15.6. FACTORS THAT MAY AFFECT COAL RESERVE ESTIMATE

There are certain areas of uncertainty that have the potential to significantly impact the estimates of coal Reserves. These areas include:

- Changes to long-term coal price assumptions: The estimation of coal Reserves is influenced by assumptions regarding future coal prices. If there are significant changes in long-term coal price projections, it could have a material impact on the economic viability and classification of the resources.
- Changes in geological interpretations: The size, shape, and distribution of the interpreted coal seams and waste materials play a crucial role in estimating coal Resources. Any revisions or changes in the geological interpretations, such as adjustments to the understanding of the deposit's geology, can impact the estimated quantity and quality of the resources.
- Changes in local interpretations: Local interpretations of seam geometry, fault geometry, and seam continuity can evolve as more data becomes available or through improved understanding of the geological conditions. These changes in interpretation can influence the estimation of coal Resources by altering the size, shape, and distribution of the coal deposits.
- Changes to input assumptions for open pit outlines: The estimation of coal Resources often involves using open pit outlines to constrain the estimate. Any modifications to the input assumptions, such as slope angles, pit designs, or mining constraints, can affect the classification and quantity of the estimated coal Reserves.
- Variations in geotechnical, hydrogeological, and mining assumptions: Assumptions related to geotechnical factors, hydrogeology, and mining methods play a crucial role in estimating coal Reserves. Changes or variations in these assumptions, such as alterations in stability parameters, water management considerations, or mining techniques, can have a significant impact on the estimated Reserves. Factors like ground conditions, water inflow, and mining constraints can affect the technical and economic feasibility of extracting the coal Reserves.
- Changes to environmental, permitting, and social license assumptions: Factors related to environmental regulations, permitting requirements, and social acceptance can play a significant role in determining the economic viability and feasibility of coal mining

projects. Any changes in these assumptions, such as stricter environmental standards or evolving social license considerations, can impact the estimation of coal Reserves.

15.7 COMMENT ON SECTION 15

The QP confirms that the estimation of coal Reserves was conducted using industry-accepted practices and adheres to the CIMDS on Mineral Resources and Reserves. The reserve estimates are based on assumptions related to open pits and underground mining. It is important to note that coal Reserves are forward-looking statements and are subject to potential variations. The actual results may differ from the estimates due to various factors

The QP asserts that there are no other significant environmental, legal, title, taxation, socio-economic, marketing, political, or any other relevant factors known to him that would materially impact the estimation of coal Reserves beyond what has been discussed in this TR.

16. MINING METHODS

16.1 INTRODUCTION

The Coal Mine commenced production at the Sunset Pit in 2008, and subsequently, production at the Sunrise Pit in 2011. To address an increased production target, SGS conducted an updated Preliminary Feasibility Study (PFS) in 2012. The current mining operation at The Coal Mine employs an open pit terrace truck-and-shovel mining method. This method is chosen due to the steep dip of the coal seams, which prevents operating machinery on the coal seam roof and floor. To accommodate this, terraces or benches are excavated at fixed horizontal horizons within the pit. These benches intersect with both coal and waste materials.

Separate mining operations are carried out for coal and waste on each bench. Dozers are utilized as needed to push coal or waste material down to the excavator, which loads the material onto haul trucks for transportation. This approach allows for efficient large-scale open pit mining in steeply dipping coal seam environments. Given the steep seam dips, waste material is dumped outside of the pit area, as in-pit dumping is not feasible. This means that waste material is transported and deposited outside the active mining area.

Overall, the open pit terrace truck-and-shovel mining method is employed at the Coal Mine to enable productive operations.



Figure 16-1. Sunset Main Pit (loading coal in north working face)



Figure 16-2. Sunset Main Pit (trucking coal out of pit)



Figure 16-3. Sunrise Main Pit (loading waste in southwest working face)



Figure 16-4. Sunrise Main Pit (trucking waste out of pit)



Figure 16-5. Sunrise Main Pit (blasting in south working face, looking southwest)

16.2 PIT OPTIMIZATION, MINE DESIGN AND LAY-OUT

According to the 2017 Technical Report, DMCL used "Pit Optimizer" module to design an optimum ultimate pit shell for the Coal Mine ("2017 Ultimate Pit Shell"), which was achieved by sub-dividing the resource model into blocks of certain dimensions with an assigned value for each block. The assigned value is the result of the revenue generated from extracting the volume of material after operating costs and other costs required to generate the revenue. Ultimate pits were designed based on multiple pit optimization parameters, geological conditions, geotechnical parameters, and other practical limitations with a depth of 300 meters below the surface. Figure 16-6 and Figure 16-7 show the 3D ultimate pit shell of the Sunset and Sunrise Pits, respectively. Details of the ultimate pit design are available from the 2017 Technical Report. Figure 16-8 shows the 3D pit design of B Field which was taken and modified from the 2022 EAMC report.



BAW reviewed the parameters and procedures of the 2017 Ultimate Pit Shell, mine design and layout stated in the 2017 Technical Report. Considering the COVID-19 pandemic outbreak in Mongolia and the Mongolia-PRC border during the period from 2020 to early 2023, BAW recommends that SGS should initiate an update of ultimate pit shell at the earliest opportunity. BAW has not performed any new ultimate pit design work at this time when this TR is prepared.

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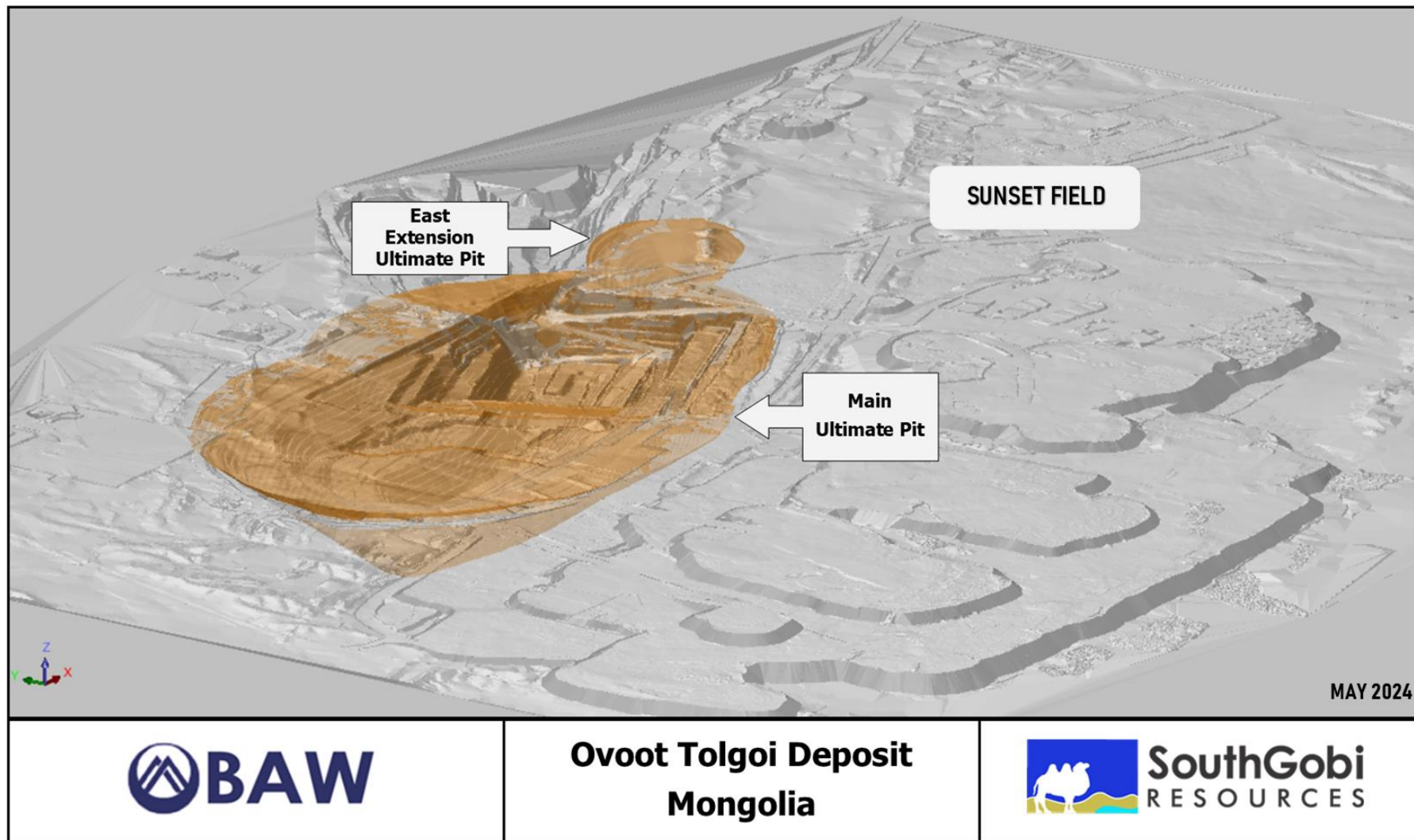


Figure 16-6. 3D view of the Sunset 2017 Ultimate Pit Shell (not to scale)

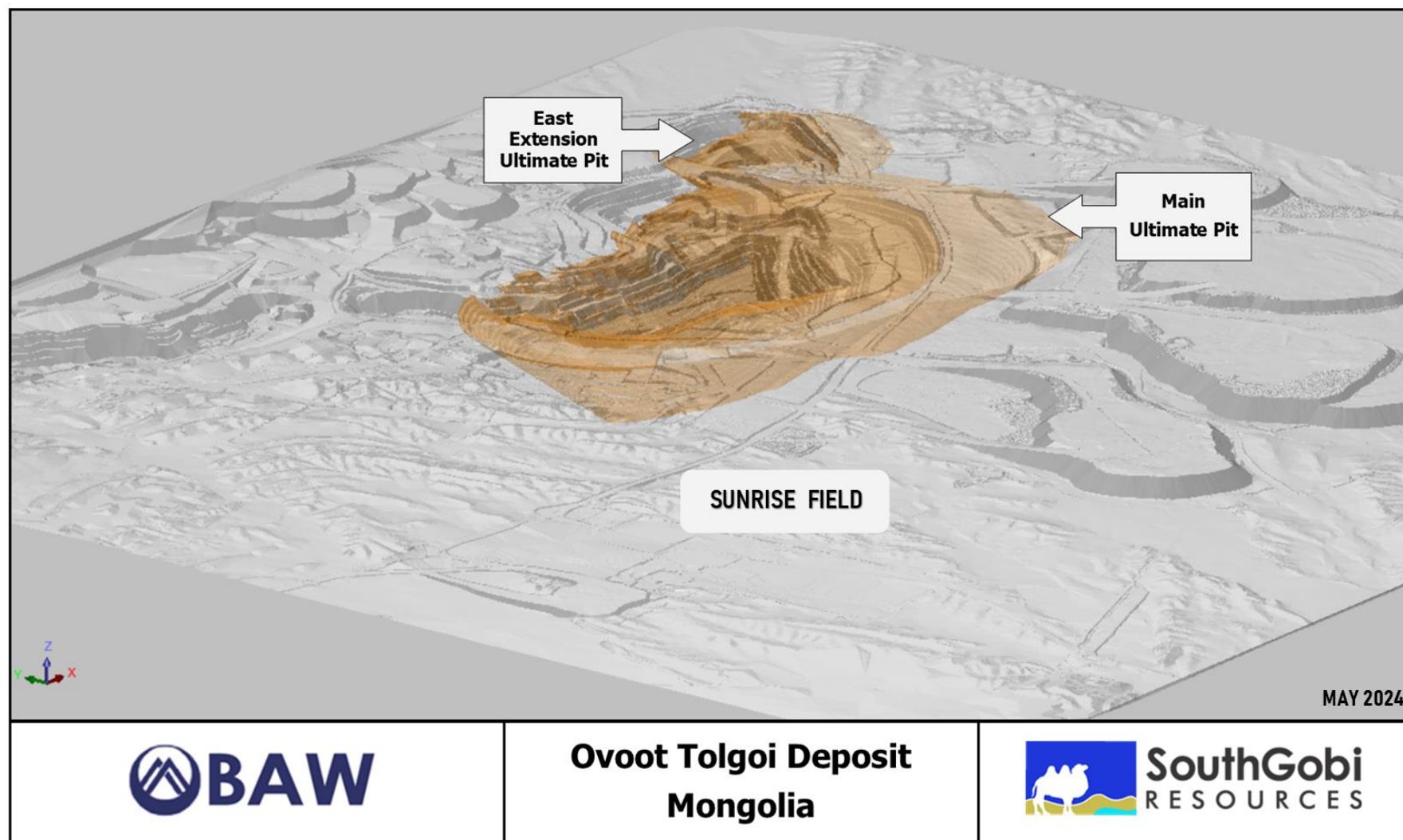


Figure 16-7. 3D view of the Sunrise 2017 Ultimate Pit Shell (not to scale)

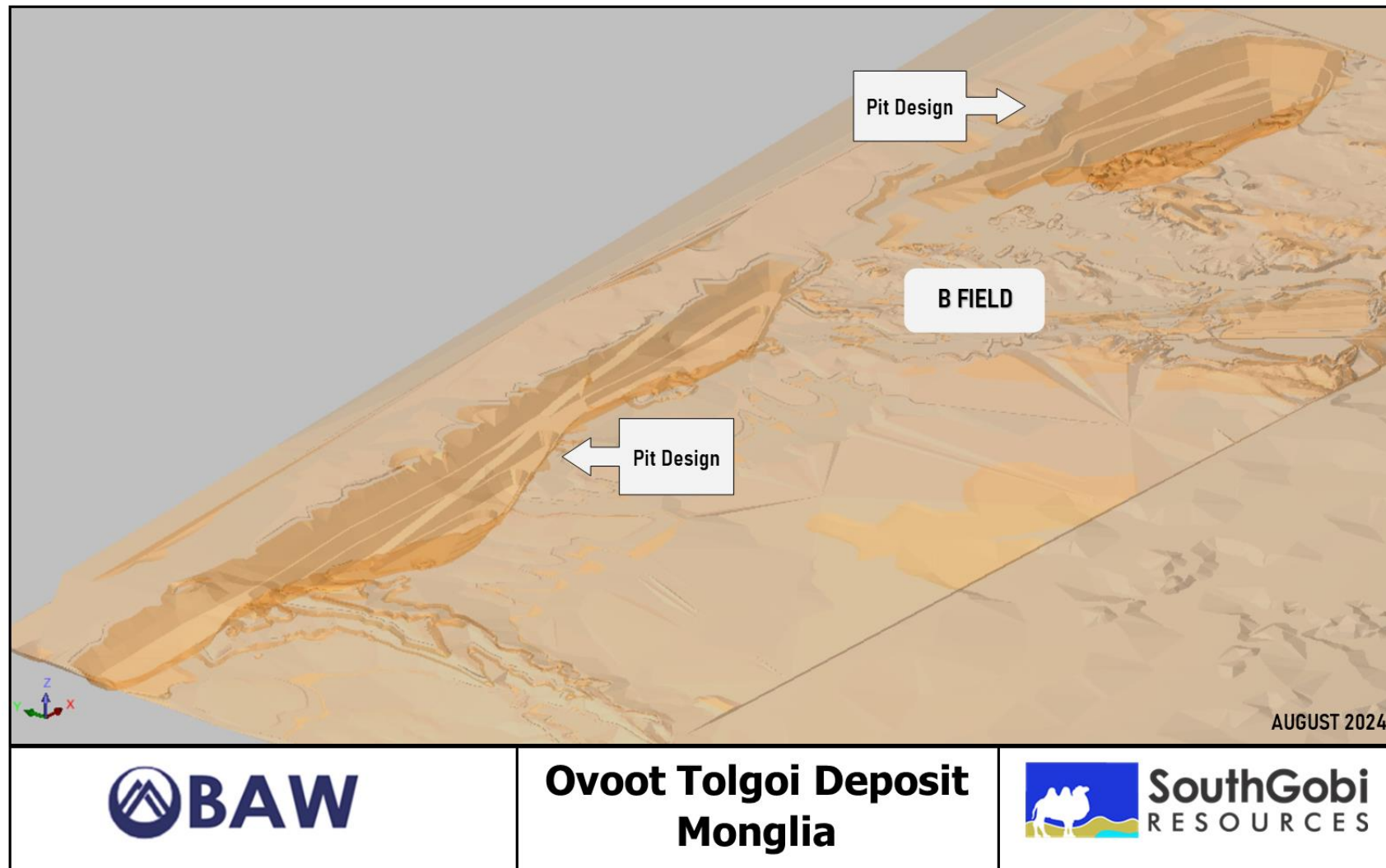


Figure 16-8. 3D view of the B Field Pit Shell 2022 (not to scale)

16.3 COAL PROCESSING

The ROM coal, based on the ash content, is classified into A Coal, B Coal, and WF Coal and is hauled to different coal processing facilities for processing. There are currently three (3) processing methods and facilities on site, including ROM coal mobile screen (Figure 16-9), jig box washing (Figure 16-10), and pneumatic jet processing (Figure 16-11).



Figure 16-9. Mobile screen



Figure 16-10. Jig box washing



Figure 16-11. Pneumatic jet processing plant

The ROM coal mobile screen is used to process A Coal and B Coal, including A⁻ and B⁻. The jig box is applied for processing WF Coal into B Coal or B⁻ or F Coals while the pneumatic jet process the WF Coal into B⁻ or F Coal. Unlike the A or B Coal, the ash content of the WF Coal ash ranges from 23% to 60%. Low ash WF Coal (< 45% db) can be washed into B or B⁻ or F Coal. High ash WF Coal (> 45% db) can be processed into B⁻ or F Coal.

Considering the process efficiency, operation cost, wash water treatment, water supply and processing capacity, it is not planned to process high ash WF Coal through the washing plant. However, the pneumatic jet is more efficient in handling the high ash WF Coal compared to the washing plant. In addition, the pneumatic jet facilities have higher availability than the washing plant.



Figure 16-12. Low ash WF Coal (< 45% db)



Figure 16-13. High ash WF Coal (> 45% db)

In addition to the washing plant and pneumatic jet facilities, a rotary breaker was installed at the Coal Mine. However, BAW understands that the rotary breaker has never been put into operation due to concerns regarding the loss of oversized coal in the reject stream, high operational costs, and frequent maintenance requirements.



Figure 16-14. Rotary Breaker

The capacity of the processing facilities is summarized as below:

- ROM coal mobile screen: 250 tonnes per hour ("tph") / per unit, assisted with a loader and an excavator with a 90% availability;
- Jig box (2 modules): 130 tph with a 40% availability; and
- Pneumatic jet (FGX-48A, 6 units): 750 tph with 80% availability.

Coal product quality control is of utmost importance such that the specification of the coal products satisfies the requirements set by the Chinese buyers.

16.4 MINE PLANNING

Production has been ongoing in the Sunset Pit and Sunrise Pit since 2008 and 2010, respectively. According to the data as of the end of 2023, a total of around 43.1 Mt of ROM coal has been extracted from the two pits. The primary coal seams being mined are Seam Nos. 5L and 5U, which have been the main sources of coal production. The Sunset and Sunrise Pits have contributed approximately 20.20 mt and 18.43 mt of ROM coal, respectively.

In order to address the expanded production target, SGS commissioned DMCL in 2016 to prepare a mine plan for both the Sunrise and Sunset Pits with a combined production target of 9 mtpa of ROM coal, as stated in the 2017 Technical Report. This mine plan was scheduled to commence in 2017 and to be completed by 2030. However, after reviewing the annual production data provided by SGS, BAW understands that, excluding the disruption caused by the COVID-19 pandemic during the period from 2020 to 2022, the actual production capacity from 2018 to 2023 was around 3 to 5 mtpa as shown in Table 16-1.

Table 16-1. Historic Production of the Coal Mine from 2018 to 2023

<i>Year</i>	<i>Sunset Pit Production (mt)</i>	<i>Sunrise Pit Production (mt)</i>	<i>Combined Production (mt)</i>
2018	1.81	2.53	4.34
2019	1.60	3.45	5.05
2020	1.11	0.38	1.49
2021	0.90	0.46	1.36
2022	0.54	0.16	0.70
2023	3.53	0.24	3.76
Grand Total	9.48	7.21	16.69

BAW believes that a combined production target of 4 to 4.5 mtpa of ROM coal, as advised by SGS, shall be achievable for the Coal Mine.

16.5 GEOTECHNICAL ASSESSMENT

DMCL in 2017 has undertaken a geotechnical review of all available geotechnical data from the SGS archived files and previous geotechnical work completed by other parties for both the Sunset and Sunrise Pits. Geotechnical assessment reports which were reviewed include:

- Memorandum – Ovoot Tolgoi Project Slope Stability Assessment and Pit Slope Design Guidelines, by Sean Ennis, Steve Bundrock, and Jay Horton of Norwest, dated May 25, 2007.
- Report (Volume I and Volume II)-Evaluation/Analysis West Pit Slope Stability Ovoot Tolgoi Coal Mine Nariin Sukhait Coal Deposits, by Ben L. Seegmiller of Seegmiller International, dated December 2008.
- Memorandum – Ovoot Tolgoi Mine Pit Wall Stability Update, by Sean Ennis of Norwest, dated September 24, 2009.
- Report - South Gobi Sands Geotechnical Assessment, by Ross Seedsman of Minarco-Mine Consult (MMC), dated March 2011.
- Report - Geotechnical Assessment of the Sunrise and Sunset Pits, by Debbie Oliver, Alan Naismith of SRK, dated March 2014.
- Geological cross-sections showing the interpreted geological structure in the pit areas, prepared by SGS geologist and engineer during the site visit.

In 2022, AMC Mining Consultant and Services cited a geotechnical investigation made by Ai Aim Kay LLC, a Mongolian geotechnical firm which evaluated the slope failures that happened in the northern walls of both Sunset and Sunrise Pits. They concluded that the reason for the landslides that occurred is due to the stretching of the coal and the presence of loose clay material within the coal bed. It was determined that due to the influence of the structure, continuous sliding occurred. They have also reiterated that SGS should follow the parameters set by previous geotechnical consultants regarding slope design to prevent or minimize slope failures in the future, especially as the mine goes deeper and wider.

BAW has not performed any new pit slope stability analysis in the preparation of this TR. BAW during its site visit observed slope failures and wedge structures which can impede mining operation in the future if not addressed properly. BAW recommends that SGS continue its daily slope monitoring routines to mitigate potential accidents caused by impending slope failures.

16.6 HYDROGEOLOGICAL ASSESSMENT

SGS commissioned RPS Aquaterra to carry out hydrogeological surveys for the Sunset and Sunrise Pits, including "Sunset Pit Depressurization Field Investigation Report" dated December 7, 2011, and "Sunrise Pit Mine Water Management Feasibility Assessment" dated February 24, 2012.

In 2017, DMCL considered that the hydrogeological characteristics of the Sunset Pit and Sunrise Pit are generally low yield, low permeability and fracture-flow based from the previous hydrogeological work. Passive in-pit-sump is adopted for dewatering at the Sunset Pit and Sunrise Pit.

BAW has not performed any new hydrogeological assessment in the preparation of this TR.



Figure 16-15. Frozen Pit Pool at the bottom of the Sunrise Extension Pit



Figure 16-16. Frozen Pit Pool at the bottom of the Sunrise Main Pit

16.7 PRODUCTION AND WASTE SCHEDULING

Most of the coal has been mined from Seam Nos. 5L and 5U of the Sunset and Sunrise Pits. The void of the Sunset Pit has a size of approximately 1,801 m long (west – east), 1,039 m wide (south – north) and 189 m deep (bottom of the pit) as of the end of 2023. The void of the Sunrise Main Pit has a size of approximately 1,875 m long (west – east), 1,129 m wide (south – north) and 194 m deep (bottom of the main pit) as of the end of 2023. The void of the Sunrise Extension Pit has a size of approximately 420 m long (southwest – northeast), 436 m wide (southeast – northwest) and 88 m deep (bottom of the main pit) as of the end of 2023.

Determining the optimal mining sequence at the Coal Mine required several iterations of scheduling. The objective was to prioritize the mining of Seam Nos 5L and 5U. To achieve this, specific pit wall pushbacks were planned for the initial years, either in the Sunset Pit or Sunrise

Pit. The preferred mining sequence incorporates a series of nested pit shells within the ultimate pit design. Additionally, pit wall pushbacks are implemented, particularly in the north wall and south wall, to facilitate mining operations. This approach allows for the extraction of coal from Seam Nos. 5L and 5U.

In the Sunset Pit, pit wall pushback is employed to mine the ultimate pit from top to bottom. This means that as mining progresses, the pit wall is progressively widened to access deeper portions of the coal deposit. In the Sunrise Pit, a bench-based pit wall pushback strategy is utilized. This approach involves mining the ultimate pit from top to bottom on a bench-by-bench basis. By implementing this method, the mining operations can efficiently progress through the coal seams.

Balancing the production and waste stripping activities between the Sunset and Sunrise Pits is crucial for maintaining a lower strip ratio throughout the LOM. This ensures that the ratio of waste material removed to the amount of coal extracted remains favorable, optimizing the overall efficiency and economics of the operation.

The updated long-term mine plan for both the Sunrise and Sunset Pits aims to achieve a combined production target of 4.5 mtpa of ROM coal with a LOM of 19 years. The mine plan is confined within the ultimate pit shells.

Table 16-2 shows the annual production and waste schedule of the Sunset and Sunrise Pits. **Error! Reference source not found.** shows the ROM coal quantities based on raw coal ash content for combined Sunset and Sunrise Pits.

Table 16-2. Annual Production and Waste Schedule of the Sunset and Sunrise Pits

Year		Sunrise Pit			Sunset Pit			Combined		
		ROM	Waste	Strip Ratio	ROM	Waste	Strip Ratio	ROM	Waste	Strip Ratio
		kt	k BCM	BCM/tonne	kt	k BCM	BCM/tonne	kt	k BCM	BCM/tonne
1	2024	1,972	5,936	4.1	2,508	8,820	4.8	4,480	14,756	4.5
2	2025	2,016	4,985	3.4	2,391	9,878	5.7	4,407	14,863	4.6
3	2026	1,974	5,138	3.6	2,493	10,030	5.5	4,466	15,168	4.7

Year		Sunrise Pit			Sunset Pit			Combined		
		ROM	Waste	Strip Ratio	ROM	Waste	Strip Ratio	ROM	Waste	Strip Ratio
		kt	k BCM	BCM/tonne	kt	k BCM	BCM/tonne	kt	k BCM	BCM/tonne
4	2027	2,094	6,366	4.2	2,371	8,254	4.8	4,464	14,621	4.5
5	2028	2,073	5,264	3.5	2,483	10,422	5.8	4,556	15,686	4.7
6	2029	2,086	5,658	3.7	2,431	10,317	5.8	4,517	15,975	4.9
7	2030	2,004	5,879	4.0	2,472	10,366	5.8	4,477	16,244	5.0
8	2031	2,167	7,011	4.5	2,502	9,891	5.4	4,669	16,902	5.0
9	2032	2,003	8,339	5.7	2,448	7,746	4.4	4,451	16,086	5.0
10	2033	2,062	9,019	6.0	2,539	6,355	3.4	4,601	15,374	4.6
11	2034	2,146	9,278	6.0	2,486	4,558	2.5	4,632	13,836	4.1
12	2035	2,108	8,192	5.4	2,356	4,258	2.5	4,464	12,451	3.8
13	2036	2,147	7,500	4.8	2,439	4,473	2.5	4,586	11,973	3.6
14	2037	2,196	7,121	4.5	2,448	4,610	2.6	4,643	11,731	3.5
15	2038	2,193	6,739	4.2	2,490	4,482	2.5	4,683	11,221	3.3
16	2039	2,107	6,551	4.3	2,426	4,248	2.4	4,533	10,798	3.3
17	2040	2,169	5,484	3.5	2,448	3,942	2.2	4,617	9,426	2.8
18	2041	2,073	1,627	1.1	945	1,552	2.3	3,018	3,179	1.5
19	2042	2,000	1,610	1.1	N/A	N/A	N/A	2,000	1,610	1.1
Total		39,588	117,697	4.1	42,676	124,204	4.0	82,263	241,900	4.1

Table 16-3. Annual ROM Coal Quantities by Ash Content for Combined Sunset and Sunset Pits

Year		ROM Kt	A	B	F
			Ash: < 12.4%	Ash: 12.4% - 15.2%	Ash: 15.2% - 50%
			kt	kt	kt
1	2024	4,480	911	1,965	1,604
2	2025	4,407	750	1,842	1,815
3	2026	4,399	558	2,193	1,649
4	2027	4,414	536	1,971	1,908
5	2028	4,561	809	2,453	1,299
6	2029	4,534	1,085	2,771	678
7	2030	4,579	1,199	2,511	868
8	2031	4,599	1,909	2,121	569

<i>Year</i>		<i>ROM</i> <i>Kt</i>	<i>A</i> Ash: < 12.4% <i>kt</i>	<i>B</i> Ash: 12.4% - 15.2% <i>kt</i>	<i>F</i> Ash: 15.2% - 50% <i>kt</i>
9	2032	4,575	1,569	2,064	943
10	2033	4,699	1,505	1,691	1,502
11	2034	4,688	2,133	1,656	900
12	2035	4,679	2,495	1,613	571
13	2036	4,648	2,497	1,602	549
14	2037	4,542	2,482	1,556	504
15	2038	4,533	2,576	1,632	325
16	2039	4,492	2,708	1,504	279
17	2040	3,810	2,231	1,225	354
18	2041	3,464	1,610	1,177	676
19	2042	2,161	121	1,775	265
Total		82,263	29,684	35,323	17,256

16.8 WASTE DUMP AND SCHEDULE

All waste is dumped ex-pit in the existing waste dump areas at the Sunset and Sunrise Pits within SGS's concession. This will also allow for future exposure and excavation of coal seams in the pits to a greater depth, provided that those coal resources are proven to be economically viable. BAW visited the active ex-pit dumps of the Sunset and Sunrise Pits in January 2024. Figure 16-17 and Figure 16-18 show the active ex-pit dumps at the Sunrise and Sunset Pits, respectively.

Table 16-4. Sunset and Sunrise Waste Dump Design Parameters

<i>Dump Design Parameter</i>	<i>Sunset Dump</i>	<i>Sunrise Dump</i>
Dump Bench Height (m)	14	14
Dump Bench Face Slope (°)	32	32

<i>Dump Design Parameter</i>	<i>Sunset Dump</i>	<i>Sunrise Dump</i>
Dump Bench Safety Berm Width (m)	6	6
Minimum Offset Distance - Pit Crest to Dump (m)	100	100
Maximum Dump Height (above current surface) (m)	120	100
Swell Factor for Waste Rock	1.2	1.2

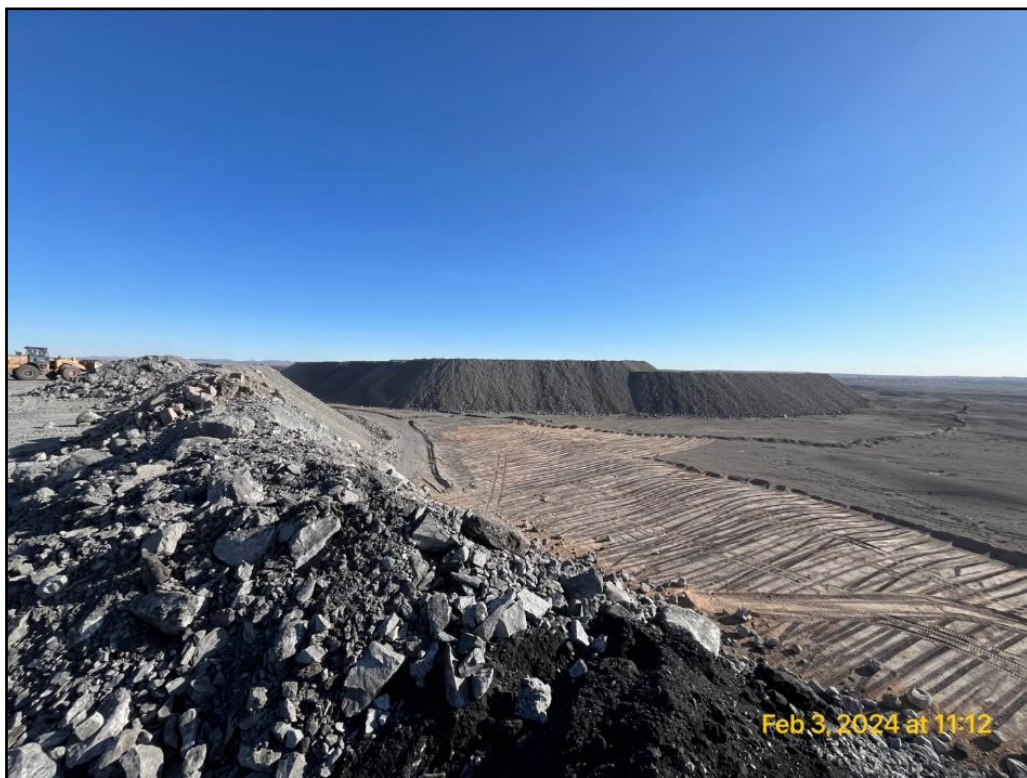


Figure 16-17. Active Ex-Pit Waste Dump of the Sunrise Pit (looking north)



Figure 16-18. Active Ex-Pit Waste Dump of the Sunset Pit (looking south)

16.9 MINING FLEET

According to the information provided by SGS, BAW understands that various models of excavator and haul trucks are currently employed by different mining contractors as well as SGS, for coal production and waste dumping activities. Active fleet utilized at the mine site is summarized in Table 16-5.

Table 16-5. Current Fleet Operating at the Coal Mine

<i>Company</i>	<i>Fleet Type</i>	<i>Model</i>	<i>Quantity</i>
Contractor A	Excavator	CAT-390	3
	Excavator	Doosan-800	2
	Excavator	PC1250	4
	Excavator	Doosan-100	1
	Excavator	CAT-6030	1
	Haul Truck	MT86	23
	Haul Truck	Howo-371	2

<i>Company</i>	<i>Fleet Type</i>	<i>Model</i>	<i>Quantity</i>
	Haul Truck	SANY-80TH	2
	Haul Truck	TONLY875	11
	Haul Truck	SANY-60TH	6
	Haul Truck	Belaz-75130	5
Contractor B	Excavator	CAT395	3
	Excavator	DX1000-LC7	1
	Haul Truck	SANY SKT90S	4
	Haul Truck	MT86	23
Contractor C	Excavator	XCMG-900	2
	Excavator	XCMG-800	4
	Haul Truck	XDR80T	42
SGS	Excavator	LIEBHERR R9250	1
	Haul Truck	TEREX MT4400	8

Excavator and truck requirements are estimated based on annual production target and haul distances.

17. RECOVERY METHODS

17.1 INTRODUCTION

In early 2016, SQR and SGS formulated optimized mining, coal processing and sales strategies such that ROM coal should be handled and processed before sales. SGS has therefore commissioned a Chinese contractor to build a wet washing plant in late 2016. The processing facilities have subsequently come into operation in 2018. More than 60% of the current saleable coal products meets the specification of 1/3 coking coal according to the Chinese classification of coals.

17.2 COAL PROCESSING

As of to date, both wet and dry processing facilities have been put into operation at the Coal Mine. During our site visit to the processing facilities, BAW was given to understand that:

- The current coal products strategy is focused on maximizing coal sales.
- The washing plant requires further optimization and modifications to achieve its designed capacity.
- Utilization of fine coals in the washing plant, as well as those around the pneumatic jet, needs to be prioritized.
- Effective processing of low-quality WF Coal directly contributes to increasing sales of higher quality coal and is crucial to maximizing revenue.
- The availability of water supply for coal washing and power supply significantly impacts production.
- Strict design and implementation of coal product quality control measures are essential.

17.2.1 Screening

- All ROM coal is required to be screened through the mobile screens for sizing and breaking to yield an undersized fraction of 200 mm.

- All coal products including A, B, A⁻, and B⁻, are crushed to <50 mm or <75 mm as homogenous final coal products as required by the Chinese standards.
- All WF Coal as pneumatic jet feed is not allowed to be greater than 80 mm.
- All WF Coal for pneumatic jet feed is required to be categorized and piled based on ash content, such as low ash WF Coal or high ash WF Coal. Coal products are tested for the ash content before sales.

17.2.2 Sorting

- All ROM coal is required to be sorted according to the ash content:
 1. Sorting at the mining face into A, B, A⁻, and B⁻ Coal.
 2. WF Coal after mining and screened at raw coal piles.
 3. WF Coal for wash plant feed as low ash WF Coal (<45%, db).
 4. WF Coal for pneumatic jet feed as high ash WF Coal (>45% db).
- Rejects or rocks are sent to the waste dump site by trucks.
- Ultra-fine coals as deslimes pressed in the washing plant are not allowed to be mixed with the coal products based on the ash content until drained and dried.
- Coal dust in the pneumatic jet yard needs to be collected, sorted, and mixed with the coal products based on the ash content category.
- ROM coal sorting is summarized in Table 17-1.

Table 17-1. ROM Coal Sorting Procedure

Mining Face (First Step)			Coal Product Sorting at Product Pile (Second Step)				Coal Products Loading (Third Step)		
Product Name	Coal Seam	Reporting Items	Target	Process Feed Sorting	Confirmation	Product Sorting	Majority	Minority	Final Product
A Coal	5, 6, 8,9	A, G, M, Q, S	A Coal Pile	-	A, G, M, Q, S	A Coal Pile	A Coal	A - Coal	A, G, M, Q, S
A- Coal	5, 6, 8, 9	A, G, M, Q, S	A-Coal Pile	-	A, G, M, Q, S	A- Coal Pile	A -Coal	B Coal	A, G, M, Q, S
B Coal	5, 6, 8, 9	A, G, M, Q, S	B Coal Pile	-	A, G, M, Q, S	B Coal Pile	B Coal	B- Coal	A, G. M, Q, S

Mining Face (First Step)			Coal Product Sorting at Product Pile (Second Step)				Coal Products Loading (Third Step)		
Product Name	Coal Seam	Reporting Items	Target	Process Feed Sorting	Confirmation	Product Sorting	Majority	Minority	Final Product
B- Coal	5, 6, 8, 9	A, G, M, S	B-Coal Pile	-	A, G, M, Q, S	B- Coal Pile	B-Coal	F Coal	A, G, M, Q, S
	5, 6, 8, 9	A, G, S @ 1.5 SG	Wash Plant Or	Washing if > 30% yield	A, G, M, Q, S	A - Coal	-	-	-
	Others	A, Q, S @ 1.5 SG	Pneumatic Jet Plant	Processing if > 30% yield	A, G, M, Q, S	B - Coal	-	-	-
		Float				F Coal			

17.2.3 Processing

The WF Coal will be processed by jig box washing and then pneumatic jet which can upgrade the coal product quality into A, B, A⁻, B⁻, or F Coal, depending on the quality of the original WF feed. The jig's advantages become evident in various aspects, including higher accuracy, a wide range of applications for different feed materials, feed top size, product coal ash, operation hours, separation efficiency, coal recovery, and consistent product quality. The utilization of the jig has contributed to improved control over these parameters, thereby enhancing overall performance and productivity. However, it is important to note that the performance of the jig can be adversely affected by certain factors, including the top size of the WF feed, parting of the feed, increased production of WF feed, water supply, the impact of cold weather and strong wind on the fine coal products, and the dewatering efficiency of the fine coal products.

17.2.4 Quality Control

To address the shortage in processing capacity, SGS implemented a comprehensive blending strategy and stringent coal quality control measures. These actions are crucial for maintaining the coal product quality and maximizing sales revenue for the Coal Mine.

Blending Strategy

The blending strategy involves meticulous combination of different coal types and qualities to optimize the overall product. By strategically blending coals with varying characteristics, such as calorific value, ash content, sulfur content, caking index taking into account the mining sequence, it becomes possible to achieve a coal product that meets the desired specifications and customer requirements. The execution of coal blending is also dependent on the availability of pile storage facilities and equipment. This approach enables the efficient utilization of available resources while compensating for any deficiencies in individual coal qualities.

Quality Control

Robust coal quality control measures are in place to monitor and regulate the entire production process. This includes thorough testing and analysis of coal samples at various stages, from mining to processing, to ensure compliance with quality standards. By implementing strict quality control protocols, any deviations or inconsistencies in coal quality can be identified and rectified promptly. The quality control process typically involves three key steps:

Verification

This step involves sampling at the mining face to verify the quality of the coal. Samples are taken and compared to the reference data available in the drillhole database. This comparison helps confirm whether the coal being mined meets the desired quality standards and specifications.

Confirmation

Sampling takes place at the product pile before loading, which is a crucial in confirming that the coal products, after processing and blending, meet the specified quality requirements. The samples obtained from the product pile are subjected to testing and analysis to ensure that the desired quality parameters, such as calorific value, ash content, sulfur content, and moisture content, are within the acceptable range. The confirmation step helps prevent any substandard coal products from being loaded and delivered to customers.

Specification

Sampling occurs in the trucks after loading the coal products. This step aims to verify that the coal products loaded for transportation adhere to the specified quality specifications. Samples are taken from the loaded trucks, and the quality parameters are tested and compared against the predetermined standards. This crucial step ensures that the coal products are consistent with the customer's expectations upon delivery.

By combining an effective blending strategy with rigorous coal quality control measures, it is indeed possible to achieve the desired coal product quality while maximizing revenue. This comprehensive approach allows for the optimization of available processing capacity, minimization of waste, and meeting the specific demands of customers. This not only enhances operational efficiency but also strengthens the competitive position in the market.

17.2.5 Yield Estimation

In 2023, the coal products achieved a yield of 94.2% against the ROM coal. Additionally, the raw coal products had a waste factor of 15.7 bcm/tonne. The WF production reached 1,327,586 tonnes, accounting for 35.28% of the total coal production. The wash plant achieved a clean coal recovery rate of 54.83%.

The yield of the coal products does not exclusively reflect the clean coal production from the two processing facilities. However, it represents the coal products processed through the mobile screens, wash plant and pneumatic jet plant, which are processing facilities at the Coal Mine.

The yield estimation needs to be estimated based on mining plan database including coal seam mining sequency, and the seam's coal quality database. Saleable coal off the seams, can be used for the yield consideration.

Based on the washability database, if the ash content is 9.09% and there is a 15% dilution out of the seams, the estimated clean coal yield is projected to be 77.80%. This estimation only takes into consideration 1/3 of the coal products from the Seam Nos. 5U and 5L seam. If both

Seam 5 groups account for 70% of the saleable coals, the 1/3 coking coal portion would represent 54.5% of the total coal products.

Given that Seam No. 5 group has the following advantages:

- Accounted for more than 70% of the total saleable coal;
- Low ash content with 1/3 coking coal properties; and
- Capable of being separately mined from the other coal seams.

The diluted coal from Seam No. 5 group needs to be processed separately from the other coal, and used as the low ash WF to be washed into the Processed A Coal in the wash plant. The estimated coal products production and quality specifications are presented in Table 17-2.

The yield of coal processing is estimated based on the coal ash estimation of different ROM coal, existing facilities (mobile screen and rotary breaker) and expected WWP processing circuit. Considering the range of ROM coal ash, the yields are estimated with corresponding ranges and averages.

Given that Seam Nos. 5U and 5L have the following advantages:

- Accounted for more than 70% of the Total Reserves;
- Low ash content with coking properties; and
- Capable of being separately mined from the other coal seams.

ROM coal from the Seam No. 5 is planned to produce two coal products, namely, screened coking coal and washed coking coal, referred to as Product SC. The washing yield is simulated using the conventional jig washing circuit and washability test.

The estimated yield of each type of ROM coal, its proposed processing method and product specifications are presented in Table 17-2.



Table 17-2. Estimated Processing Yield and Product Specifications

Pit	ROM Coal Category				Coal Product Category										
	ROM Coal Name	Seam	Ash ad, %	Coking Properties	Product Name	Yield % Range	Yield % Average	Ash ad, %	Moisture ad, %	VM daf, %	FSI	Sulphur ad, %	CV ad, kcal/kg	Application	Processing Method
Sunset	A1	5	≤ 10	yes	SC	100-95	98	10.0	7.0	36.0	4.5	< 1.0	7,000	Coking Coal	Screening
					SC	85 - 65	75	10.0	7.0	36.0	4.5	< 1.0	7,000		
	B1	5	10 - 18	yes	TC	15 - 5	10	18.0	8.0	38.0	-	1.3	6,200	Thermal Coal	Washing
		5	10-18	no	TC	n/a	n/a	15.0	5.0	37.0	-	1.2	6,200	Thermal Coal	Screening
	F1	8, 9,	18-28	no	J	60-75	65	18.0	5.0	40.0	-	1.4	6,000	Thermal Coal	Screening
	F2	10	28 - 50	no		50-60	55	28.0	5.0	40.0	-	1.4	5,500		Screening
Sunrise	A1	5	≤ 10	yes	SC	100-95	98	10.0	7.0	36.0	4.5	< 1.0	7,000	Coking Coal	Screening
					SC	85 - 55	65	10.0	7.0	36.0	4.5	< 1.0	7,000		
	B1	5	10 - 50	yes	TC	30 - 10	20	18.0	8.0	38.0	-	1.3	6,200	Thermal Coal	Washing
		5	10-18	no	TC	n/a	n/a	15.0	5.0	37.0	-	1.2	6,200	Thermal Coal	Screening
	F1	6, 7	18-28	no	J	60-75	65	18.0	5.0	40.0	-	1.4	6,000	Thermal Coal	Screening



Pit	ROM Coal Category				Coal Product Category										
	ROM Coal Name	Seam	Ash ad, %	Coking Properties	Product Name	Yield %		Product Specification							Processing Method
						Range	Average	Ash ad, %	Moisture ad, %	VM daf, %	FSI	Sulphur ad, %	CV ad, kcal/kg	Application	
	F2		28 - 50	no		50-60	55	28.0	5.0	40.0	-	1.4	5,500		Screening

17.3 FINISHED COAL PRODUCTS

Given that the ash content and $G_{R.I}$ may vary from seam to seam. For example, Seam Nos. 5, 6, 7 and 8 have coking coal properties with low ash content, while the other seams may not, the best optimized processing strategy is to deliver multi-clean coal products which will maximize the value of the mining operation of the Coal Mine. The specifications of the finished main coal products are summarized in Table 17-3.

Table 17-3. Finished Main Coal Products of the Coal Mine

<i>Product Name</i>	<i>Product Specification</i>					<i>Use</i>
	<i>Ash ad, %</i>	<i>Mt ad, %</i>	<i>$G_{R.I}$</i>	<i>Sulphur ad, %</i>	<i>CV ad, kcal/kg</i>	
Premium Coal (A)	<10	<6	>65	< 1.0	>6,800	Coking coal
Standard Coal (B)	15 - 25	<6	30-50	<1.5	→5500	Thermal coal
F	25-40	<6	<5	<1.7	→4500	Thermal coal



18. PROJECT INFRASTRUCTURES

Significant infrastructure has been developed at the mine site, encompassing various facilities to support the operations. These include coal handling facilities, coal stockpile, coal washing plant, waste dump, heavy equipment workshops, office buildings, employee accommodations, and an airstrip designed to handle commuter aircraft for employee transportation. These infrastructure developments are vital for ensuring efficient and effective mining operations at the site.

Trucks are employed to transport coal from the mine site to the Ceke border in the PRC. The transportation route primarily involves the use of paved roads. Upon reaching Ceke, the coal is then transferred into rail wagons or trucks for onward shipment to customers. This logistical process ensures the smooth flow of coal from the mine site to its intended destinations, thereby meeting the demands of the market.

The camp's water requirements are fulfilled through the utilization of water supply wells drilled in the vicinity. Additionally, water for dust suppression purposes is sourced from the pit dewatering system. In 2012, SGS commissioned a hydrogeological survey conducted by Aquaterra, which identified a water source located approximately 30 km away from the mine site. According to the survey findings, the groundwater from this source was deemed suitable for industrial use and capable of supporting a wet coal processing plant for consistent coal washing operations. Subsequently, SGS obtained a water permit, authorizing the use of this water source for their operations. This comprehensive approach to water management underscores SGS's commitment to ensuring an adequate and sustainable water supply for the camp's needs, as well as supporting crucial industrial processes such as coal washing.

Initially, electrical power for the camp and shop complexes was initially supplied by diesel generators. However, the camp and shop complexes are now connected to a power line that runs from the PRC to Gervantes Soum, providing electrical power to the mine site.

19. MARKET STUDIES AND CONTRACTS

19.1 GENERAL OVERVIEW

SGS commissioned a market research firm, Valtech Valuation Advisory Ltd ("Valtech"), in December 2023 to prepare an independent market analysis and price forecast for its coal products from 2023 to 2042. The following sections are extracted from that report and BAW after carefully examining the report has no reason to doubt the reliability of such information.

Coal price is mainly influenced by supply-demand relation, coal quality, economic fundamentals, PRC's industry specific policies, thermal coal demand, coking coal demand and global and regional logistics challenges. Prolonged geopolitical tensions and regional conflicts such as the Russian – Ukraine war and the Israeli-Hamas conflict disrupts could also play a role in domestic coal price in the short to medium terms. Details of those impacts are available in the original market research report.

19.2 METHODOLOGY

Selection of Target Markets

1. Ceke - Benchmark coal: Ceke 1/3JM
2. Wuhai
 - Benchmark coal: Wuhai 1/3JM
 - Benchmark thermal coal: Jiayuguan 5,500 Kcal/kg NAR
3. Guchengguan - Benchmark coal: Inner Mongolia 5,500 Kcal/kg NAR
4. Jinqian - Benchmark coal: Inner Mongolia 5,500 Kcal/kg NAR
5. Huinong - Benchmark coal: Inner Mongolia 5,500 Kcal/kg NAR
6. Caoheidian - Benchmark thermal coal: BSPI 5,500 Kcal/kg NAR

Key Assumptions

1. Domestic coal prices feature co-movement. We assume the domestic coal market is a fully competitive market, then the coals with the same quality will have similar prices.

2. Although the coal markets in China's northwestern and coastal regions may have some independence, the historical price trend has proved that China coal prices in different regions still feature co-movement.
3. We net back calculated selling prices in consumption areas into the prices at the Ceke Border.
4. The annual average price throughout a year will represent the annual price.

Forecast Method

1. To forecast thermal coal and 1/3JM prices at transfer ports considering China coal supply-demand pattern.
2. To forecast prices at target markets based on price variation trend at transfer ports.
3. To estimate SGS 1/3JM prices at target markets: benchmark coal price to minus price difference and then consulting with premium/penalty standard.
4. To estimate the transport cost from Ceke Border to the target markets.
5. SGS 1/3JM price at Ceke = selling price at the target markets – transport cost.
6. Pithead price is estimated after adjustment for import VAT, custom duty, mine-gate transportation, inspection & quarantine fees, and warehouse storage fee.

19.3 PRICE FORECAST

The forecasted prices of different target markets are based on the factors explained above. The forecasted selling price at Ceke Border is derived by deducting the benchmark coal price at the targeted markets by the logistics cost from Ceke border to targeted prices. The forecasted selling prices at mine gate are derived by deducting forecasted prices at Ceke border by the logistics cost and PRC import duty and taxes as provided by SGS and summarized below:

Table 19-1. Price Forecast at Mine Gate (in RMB)

	<i>2024E</i>	<i>2025E</i>	<i>2026E</i>	<i>2027E</i>	<i>2028E</i>	<i>2029E</i>	<i>2030E</i>	<i>2031E</i>	<i>2032E</i>
Premium-A 1/3 JM (Ceke)	780	783	790	800	812	822	830	841	852

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Standard-B									
Thermal coal	466	467	472	479	490	501	510	520	530
6500 (Ceke)									
Washed-B									
Thermal coal	405	406	411	417	427	437	445	454	464
6500 (Ceke)									
F coal – mixed									
Washed B with	390	391	395	402	411	420	428	437	446
Screened F coal									

	2033E	2034E	2035E	2036E	2037E	2038E	2039E	2040E	2041E	2042E
Premium-A 1/3										
JM (Ceke)	864	875	887	899	912	925	938	952	965	979
Standard-B										
Thermal coal	542	552	564	576	588	600	613	625	638	651
6500 (Ceke)										
Washed-B										
Thermal coal	474	484	494	505	516	527	538	550	562	574
6500 (Ceke)										
F coal – mixed										
Washed B with	456	466	476	486	497	507	518	529	541	552
Screened F coal										

US\$/RMB is assumed to be 7:24

19.4 CONTRACTS

SGS generally negotiates coal sales contracts on a monthly basis. The number of customers changes quarterly but has generally been in the range of 5-8 customers in any given quarter.



20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.1 ENVIRONMENTAL STUDIES

In 2006, SGS submitted a key environmental report titled "Detailed Environmental Impact Assessment (DEIA) for the Nariin Sukhait Coal Deposit Mining Project" prepared by Environmental Consulting Company (ENCO) with its Addendum prepared in 2008.

The DEIA discussed various changes at the Coal Mine in relation to volume of coal production and waste rocks, pit dimensions and depth, waste rock dumps ("WRD") volume, number of operating days, daily operating duration, workforce required, extended LOM and relocation of the accommodation camp, resulting from expanded production target. The Addendum reviewed the possible impact of each of these changes and concluded that "most of the impacts of the changed mining plan would be within the range of effects already described in the original DEIA".

According to the Addendum, the impact on groundwater from the deeper pits was initially considered a potential exception to the range of original impacts. However, as mining progressed, it was observed that the quantity of groundwater flowing into the pits is lower than originally anticipated. Consequently, the impact of mining on groundwater has been less significant.

In 2010, a hydrogeological survey was commissioned by SGS which aims to investigate ground water sources near the Coal Mine. It was stated that the revised estimates of mine inflows at the Sunset Pit suggest that dewatering production will be sufficient for immediate mine water requirements and may provide a supplementary water source. However, it was noted that dewatering production could not be considered a viable long-term supply. During the BAW's site visit, it was observed that the pit water had not been reported to be a significant issue that would adversely affect the mining operation as it advances in the Sunrise and Sunset pits.

In 2023 SGS submitted another Addendum prepared by Make Green Environmental Consulting Services LLC (MGECS) which detailed the various changes at the Coal Mine in relation to the



volume of coal production and waste rocks, pit dimensions and depth, WRD volume, workforce required, increased fleet of heavy mining equipment and extended LOM, accident and risks assessment, evaluation of major and potential mining impacts and prepared corresponding preventive measures to mitigate adverse effects brought by mining.

20.2 WATER PERMIT

In 2014, SGS obtained approval from the Water Resources Committee of The Natural Environment Green Developing Tourism Department of Mongolia. This approval granted SGS the authority to engage in production activities with specified capacity limits in various locations. The approved production capacities are as follows: 10,212 m³/day in Maidar and Jargalant, 29,376 m³/day in Baynling and Harztain Bulag, 18,144 m³/day in Tuul and Unsugen, and 17,712 m³/day in Toooin Shand.

20.3 ENVIRONMENTAL PROTECTION PLAN

The environmental protection plan (EPP) for the Ovoot Tolgoi Coal Mine, located in the Gurvantes Sum area of Umnugobi province, has been developed in accordance with the order A/618 of the Minister of Environment and Tourism dated October 29, 2019, which provides guidelines for the development, reporting, and review of EMPs. The EMP is designed to cover a period of five years.

The current EPP, outlined in the MGECS addendum report in 2023, is scheduled to be implemented from 2024 to 2028. The EPP includes an annual environmental management work plan that considers the potential negative impacts of the project on the environment. The work plan outlines the specific measures to be implemented by the project, ensuring compliance with environmental protection laws and regulations.

The EPP incorporates an environmental monitoring program, which specifies the methods, required funds, costs, and periods for monitoring and analyzing changes in the environmental conditions resulting from the project activities. This monitoring program plays a crucial role in



assessing the project's impact on the environment. It enables the project team to evaluate the effectiveness of environmental protection measures and to plan and implement additional measures if necessary.

The EPP serves as a summary of the environmental protection measures to be implemented and is subject to annual review and refinement. This iterative process ensures that the EMP remains up to date and responsive to any changes or new findings that may arise during the project's implementation.

Through the comprehensive EPP and the accompanying environmental monitoring program, the Ovoot Tolgoi Coal Mine project aims to proactively manage and mitigate its environmental impact. The regular evaluation of the project's environmental performance and the implementation of additional measures when needed demonstrate a commitment to environmental stewardship and compliance with regulations.

Table 20-1. 5-Year Environmental Protection Plan and Budget

Item	Composition Parts	2023	2024	2025	2026	2027	Total, thousand MNT
1	Negative Impact Reduction Plan	37,500	7,500	7,500	7,500	7,500	67,500
2	Biological Recovery Plan	5,020	5,020	5,020	5,020	5,020	25,100
3	Green Facility Plan	200,000	200,000	200,000	200,000	200,000	1,000,000
4	Equal Protection Measures Plan	66,140	66,140	66,140	66,140	66,140	330,700
5	Relocation Compensation	116,000	580,000	-	-	-	696,000
6	Historical and Cultural Heritage Protection Plan	4,000	-	-	-	-	4,000
7	Socio-Community Effects Management Plan	-	145,000	170,000	180,000	280,000	775,000
8	Accident and Risk Management Plan	127,432	126,900	126,900	126,900	126,900	635,032
9	Garbage Management Plan	18,000	6,250	6,250	6,250	6,250	43,000
10	Environmental Control Analysis Program	94,800	94,800	94,800	94,800	94,800	474,000
Total		668,892	1,231,610	676,610	686,610	786,610	4,050,332

20.4. WASTE AND TAILINGS MANAGEMENT

Different kinds of waste are generated during the mining operation. Solid, liquid, gas and hazardous wastes are being managed by SGS in accordance with company waste management plans and relevant resolutions provided by relevant agencies in Mongolia.

The operation and management of tailings facilities prioritize the implementation of best applicable practices, considering guidance from company policies and procedures and direction from relevant agencies in Mongolia. Designs for tailings facilities are established with careful consideration of the potential consequences on human life, the environment, and the economy. This approach reflects the commitment to responsible and sustainable mining practices. The design process considers various factors to ensure the safety and integrity of the facility, as well as to mitigate potential risks.

20.5 CLOSURE CONSIDERATIONS

SGS is dedicated to ensuring successful reclamation and restoration of areas affected by mining activities, aiming to restore them to a self-sustaining state. This is achieved through various measures, including the re-vegetation of disturbed areas using native plant species and utilizing other mitigation options.

This progressive rehabilitation and reclamation approach allows for the timely restoration of the environment as facilities are no longer required for operations. This method includes the establishment of a green structure and the implementation of biological remediation measures. Specifically, it is planned to undertake biological remediation on a total area of 2.0 hectares within the mining area. To support these activities, a budget of 25,100,000 MNT has been allocated for the five-year period from 2023 to 2027.

The establishment of a green structure involves the implementation of vegetation and landscaping initiatives to restore the ecological balance and promote the growth of native plant species in the affected areas. This contributes to the overall rehabilitation and reclamation of the mining site, aiming to restore it to a more natural and sustainable state.



Biological remediation focuses on utilizing biological agents or processes to assist in the restoration of the mining area. This can involve techniques such as the introduction of beneficial microorganisms or the use of specific plant species with remediation properties to restore soil health and enhance ecosystem resilience.

In cases where some impacts persist despite avoidance, minimization, and rehabilitation efforts, SGS implements restoration measures and/or offsets to ensure a net positive impact on the environment. These offsets are designed and implemented to compensate for any remaining impacts on the landscape, contributing to SGS's goal of achieving a positive environmental outcome.

Through these comprehensive measures, SGS demonstrates its commitment to responsible mining practices, emphasizing the importance of environmental stewardship and the restoration of disturbed areas to a self-sustaining state.

20.6 COMMUNITY INVOLVEMENT

SGS initiated the process of signing a cooperation agreement with the administration of Umnugobi Province. This agreement aims to regulate the collaboration between SGS and the provincial administration, with a focus on SGS's contributions to the socio-economic growth of Umnugobi Province, particularly in the western region where SGS operates. In addition, the agreement ensures the smooth functioning of SGS's production, finance, and business operations within the licensed area.

As part of its Corporate Social Responsibility Strategy, SGS plans to develop and implement Community Development Plans for each of the soums (administrative subdivisions) where it operates. These plans are created in close coordination with the respective government authorities and community members, emphasizing SGS's commitment to local development.

Furthermore, SGS entered into a cooperation agreement with the Vocational Training and Production Center (VTPC) of Umnugobi Province. The primary objective of this collaboration



is to enhance the skill sets of teachers and students at the VTPC and provide training opportunities for individuals seeking employment within the mining sector. As per the agreement, students will have the opportunity to participate in internships at the Coal Mine operations, facilitating their practical learning and increasing their chances of securing employment in the industry.

20.7 PERMITTING

As of December 31, 2023, all necessary licenses and permits and their subsequent amendments are in place for current operations at the Coal Mine.

20.8 COMMENT ON SECTION 20

The QP understands that SGS, as of to date, continues to perform environmental studies for the Coal Mine including annual environmental management plan and implementation reports which address the issue of environmental monitoring program, environmental protection measures and budget, risk mitigation measures and budget, protection of historical and cultural heritage, community engagement program, rehabilitation work program and budget. BAW considers that SGS's work can adequately address the need for environmental management at the Coal Mine.



21. CAPITAL AND OPERATING COSTS

21.1 CAPITAL COSTS

Capital Costs or Capital Expenditure ("CAPEX") generally comprises of Development and Expansion CAPEX, Sustaining CAPEX, Rehabilitation CAPEX and Exploration CAPEX. BAW understands that the Coal Mine has prepared a projection of Development and Expansion CAPEX and Sustaining CAPEX for further mine development, mining equipment and support facilities based on their long-term mine planning and Rehabilitation CAPEX for proposed rehabilitation program and environmental work, which is reasonable and conformable with the industry practice. Meanwhile, no projection was made for Exploration CAPEX. The CAPEX projected for the Coal Mine is summarized in Table 21-1 for the period from 2024 to 2038.

Table 21-1. Forecasted CAPEX for the Coal Mine (US\$ in million)

Year	2024	2025	2026	2027	2028 - 2042 (Accumulated)
Sustaining CAPEX	5.27	5.38	5.27	5.27	50.06
Rehabilitation CAPEX	-	-	-	-	-
Development and Expansion CAPEX	40.41	22.01	24.76	28.03	266.27
Exploration CAPEX	2.37	2.37	2.37	2.37	28.44
Total	48.05	29.76	32.40	35.67	344.77

BAW understands that SGS has entered contracts with two Mongolian mining contractors and two Chinese mining contractors for the purpose of undertaking stripping and mining operation at the Coal Mine. In general, contract-mining agreements have the advantage of significantly reducing the CAPEX required by SGS for alternative mining strategies and future production capacity expansion. Additionally, it ensures a higher utilization rate of mining equipment which generally requires a timely supply of various parts. The mining contractors are expected to have reasonable advantages, compared to contractors from other regions, in terms of maintaining a

steady supply of different parts for the mining equipment given that the Coal Mine is located only around 45km away from the Ceke border in the PRC.

21.2 OPERATING COSTS

Operating costs or Expenditure ("OPEX") can be classified into operating cash costs and total production costs. The operating cash costs generally include mining costs, processing (washing) costs, general and administration (G&A) cost, selling costs, environmental protection costs, taxes, resource compensation levy, interests on loans and other cash cost items. The total production costs comprise the operating cash costs, depreciation/ amortization costs and other non-cash cost items. The historic and forecasted operating costs are summarized in Table 21-2.

Table 21-2. Forecasted Operating Cash Costs for the Coal Mine

Operating Cash Costs	Unit	2024	2025	2026	2027	2028 till the end of LOM
(A) Mining and Coal Processing						
Workforce Employment	USD/t raw coal	1.03	1.03	1.03	1.03	1.03
Consumables, Fuel, Electricity and Water	USD/t raw coal	1.13	1.13	1.13	1.13	1.13
Maintenance, Repair and Other	USD/t raw coal	0.30	0.30	0.30	0.30	0.30
Contractor mining cost	USD/t raw coal	33.48	33.48	33.48	33.48	33.48
Environmental and safety costs	USD/t raw coal	0.10	0.10	0.10	0.10	0.10
Coal Preparation and Handling	USD/t raw coal	0.02	0.02	0.02	0.02	0.02
Total Mining and Preparation Cost	USD/t raw coal	36.06	36.06	36.06	36.06	36.06
(B) General & Admin (G&A)						
On- and Off-Site Management	USD/t raw coal	1.78	1.78	1.78	1.78	1.78



Marketing and selling expense	USD/t raw coal	10.45	10.45	10.45	10.45	10.45
Non-Income Taxes, Royalties and Governmental Charges	USD/t raw coal	9.29	9.29	9.29	9.29	9.29
Total G&A Cost	USD/t raw coal	21.51	21.51	21.51	21.51	21.51

Total Operating Cash Costs (A+B)	USD/t raw coal	57.57	57.57	57.57	57.57	57.57
(C) Depreciation and Amortization	USD/t raw coal	1.11	1.11	1.11	1.11	1.11
Total Production Cost (A+B+C)	USD/t raw coal	58.68	62.67	66.94	71.49	76.35

Coal Washing *	USD/t output coal	11.32	11.32	11.32	11.32	11.32
Coal Screening	USD/t output coal	1.10	1.10	1.10	1.10	1.10
Dry Processing	USD/t output coal	6.43	6.43	6.43	6.43	6.43

BAW understands that SGS has gradually switched from traditionally self-mining to contract-mining since 2017 in order to reduce mining cost and effectively address the additional demand of mining equipment and labor force resulted from the new mining strategy and expanded production target.

21.3 DISCUSSION

BAW reviewed the SGS's projection for CAPEX and OPEX prepared for the Coal Mine and finds it to be fair and reasonable. These forecasts consider the planned production targets, anticipated future cost escalation and potential unit cost savings resulting from enhanced productivity. Based on this analysis, BAW believed that these estimates are generally attainable.



22. ECONOMIC ANALYSIS

22.1 INTRODUCTION

Considering the economic viability of the reserve estimated in this TR resulted from the latest mine plan and production schedule, BAW performed an economic analysis for the Coal Mine to assess the economic viability with respect to the reserve estimated throughout the LOM.

Determination of economic viability involves the sum of discounted annual free cash flow projected from the start of the year till the end of the LOM. The revenue is based on the production of clean coal. The operating costs are based on the actual production records. The estimates of sustaining capital expenditures were developed specifically for the operation. The economic analysis uses the Probable and Proven Reserves only as described in the section of Mineral Reserve Estimation of this TR.

The economic analysis presented here is on a 100%-equity basis that shows the basic economics of the project and does not incorporate financing items such as interest paid, and loan principal paid back. The analysis also does not incorporate any losses carried forward for tax purposes and any refund of valued-added taxes previously or currently paid.

It should be emphasized that the results of the economic analysis represent forward-looking information that are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented here. Forward-looking statements in this section include statements with respect to the future price of commodities, the timing and amount of estimated future production, costs of production, capital expenditures, results of the permitting process, currency exchange rate fluctuations, requirements for additional capital, government regulation of mining operations and taxation, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage.

Additional risk may derive from actual results of changes in parameters as plans continue to be refined, possible variations in ore reserves, grade or recovery rates, failure of processing and

mining equipment, accidents, labour disputes and other risks of the mining industry, and potential delays in obtaining additional governmental approvals.

22.2 REVENUE

Annual revenue is determined by applying estimated coal prices to the estimated annual payable raw coal for each operating year. Coal prices have been applied to all LOM production without hedging. The revenue is the gross value of payable clean coal sold before transportation charges. Projected annual revenue of the Coal Mine is summarized in Table 22-1 below.

Our economic analysis adopted the recent coking coal prices in the PRC. Given the long-term uncertainty of price associated with commodities, the selling prices were assumed to be stationary, and no price increased was factored into the revenue projection.

Table 22-1. Projected Annual Revenue of the Coal Mine

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Revenue (US\$ million)	313	299	292	289	317	334	339	375	355	354

Year	2034	2035	2036	2037	2038	2039	2040	2041	2042
Revenue (US\$ million)	387	406	404	397	402	406	340	287	142

22.3 DISCOUNTED CASHFLOW PROJECTION

Based on the revenue, CAPEX (Section 21.1), operating cash costs (Section 21.2), taxes and government charges described in previous sections (Section 4.6), the Net Present Value ("NPV") for the Coal Mine is estimated to be US\$ 146 million at a discount rate of 15% for the base case. It is demonstrated that the Reserve presented in this TR is justified with economic viability. Projected annual discounted cashflow to the Coal Mine is summarized in Table 22-2 below.

Table 22-2. Projected Annual Discounted Cashflow of the Coal Mine

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Revenue (US\$ million)	(8)	0	(7)	(9)	9	15	15	20	14	11

Year	2034	2035	2036	2037	2038	2039	2040	2041	2042
Revenue (US\$ million)	15	17	14	11	10	10	5	5	0

23. ADJACENT PROPERTIES

Broadly speaking, the southwestern corner of the Umnugobi Aimag, also known as the South Gobi province, exhibits potential for the occurrence of high-quality coal resources. Based on the information provided by SGS, the region houses a total of five (5) operating coal mines in addition to the Coal Mine itself, namely, Mongolyn Alt Corporation (MAK), Usukh Zoos, EAI, Javhlant Ord and Terra Energy. Their coal products are sold through the Ceke Border to the Chinese customers.

MAK and Usukh Zoos are operating on the Nariin Sukhait deposit immediately north of the Coal Mine. EAI is operating its coal mine located approximately 20 km south of the Coal Mine. Javhlant Ord operates its coal mine located approximately 30 km north of the Coal Mine. Terra Energy is operating its coal mine located approximately 70 km east of the Coal Mine.

The QP has been unable to verify the information on the above adjacent operating mines. The information in this section is not necessarily indicative of the mineralization at Ovoot Tolgoi Coal Mine.

In addition, situated approximately 20 km east of the Coal Mine is the Soumber Coal Project, which is also owned by SGS. An extensive exploration program, which offers a better understanding of the geological characteristics and resource potential, has been completed for Soumber. Furthermore, in 2023, a pre-feasibility study was conducted for the Soumber project. This study involved a detailed evaluation of various technical, economic, and environmental factors associated with the project's development. The outcomes of the pre-feasibility study have contributed to a better understanding of the project's viability and have laid the foundation for SGS's management to further formulate strategic planning.

Given that MAK's concession lies immediately adjacent to the Coal Mine, a Memorandum of Understanding (MOU) between MAK and SGS covering mining operation across the concession boundary was first signed on May 24, 2007. Subsequently, a cooperation agreement has been entered by MAK and SGS on February 20, 2014, which allows SGS to strip off the



overburden in MAK's property at SGS's own cost. The coal within the pits and within MAK's concession has been treated as generating no revenue and having no associated cost. Such an agreement is significant to SGS's LOM operation and long-term mine planning. BAW understands that the agreement has been properly honored by both parties since its establishment. It is worth noting that the current Resource and Reserve estimates documented in this report do not contain any coal within MAK's concession



24. OTHER RELEVANT DATA AND INFORMATION

BAW is not aware of any other mining, processing, infrastructure, environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that would materially affect the Resource and Reserve estimate of the Coal Project.

25. INTERPRETATION AND CONCLUSIONS

Considerable work has been completed at the Coal Mine, including systematic exploration, resource delineation and estimation, washability tests, pre-feasibility study, mine planning, production scheduling, equipment selection, optimized sales strategy, reserve estimation and environmental impact assessment.

BAW's technical review of drillhole data and the resource model, and its on-site assessment suggested the Coal Mine has been subjected to a significant amount of tectonic deformation comprising an east-west-trending regional thrust fault with hanging wall strata modified by different secondary folding. Coal seams are typically dipping from 35° to 55° in Sunrise and Sunset Pits and from 12° to 83° in B Field Prospect. Based on these characteristics, the Coal Mine was classified under Complex Geology-Type deposit whereas B Field Prospect is classified under Severe Geology-Type deposit.

The Reserves at the Coal Mine have been estimated to total 82.26 Mt. This includes 42.68 Mt at the Sunset Pit and 39.59 Mt at the Sunrise Pit. Proven Reserve, which consists solely of the Measured Resource, has a total of 69.46 Mt. Among this Reserve, 41.56 Mt are located at the Sunset Pit while 27.9 Mt are located at the Sunrise Pit. Probable Reserve, which consists solely of the Indicated Resource, amounts to 12.81 Mt. This Reserve includes a 1.12 Mt at the Sunset Pit and 11.69 Mt at the Sunrise Pit.

Based on the optimized mining strategy and processing strategy, four types of finished coal products are produced at the Coal Mine, comprising of metallurgical coal and thermal coal.

26. RECOMMENDATIONS

26.1 EXPLORATION

- Downhole surveys of verticality should be carried out for future drilling programs to enhance the accuracy of the resource model and subsequent resource estimation. This ongoing annual cost is estimated to be approximately US\$ 10,000.
- Further core drilling is recommended in the B Field Prospect to thoroughly assess the metallurgical characteristics of the coal seams and to increase the confidence level in the estimation of coal resources.

26.2 RESOURCE MODELLING

- As further exploration programs and coal quality sampling programs proceed, the resource model should be updated on an on-going basis to develop a better understanding of the geology and coal quality for refining the mine plan in the future. This will be an ongoing annual cost of approximately US\$ 10,000.
- Routine data validation and verification should be continued for additional exploration data as an integral part of the database management system. No cost impact.

26.3 GEOTECHNICAL ENGINEERING

- Detailed geotechnical assessment of pit wall stability is recommended to be an integral part of a short-term mine plan and detailed mine design. This will be an ongoing annual cost of approximately US\$ 50,000.
- Long-term and continuous monitoring, analysis, review and reporting of the pit wall stability should be considered as a routine practice by the mine site to ensure production and safety of the workers. No cost impact.

26.4 HYDROGEOLOGY

- Hydrogeological data should be reviewed on an ongoing basis, and it is recommended to be an integral part of a short-term mine plan and detailed mine design. This will be an ongoing annual cost of approximately US\$ 20,000.
- The groundwater model should be updated by integrating the data collected from historical and existing groundwater monitoring wells. This will be approximately US\$ 40,000.
- Routine monitoring will be conducted for employment of pit dewatering system as appropriate to enhance pit wall stability and reduce pit seepage, if necessary, with the pit development. No cost impact.

26.5 MINING

- The mining operation should implement the updated mine plan to achieve the goals set out by the latest mining strategy, processing strategy and sales strategy. No cost impact.
- A more detailed reserve model is recommended to be developed, to address the need of a more detailed monthly production schedule and short-term mine plan with the integration of, such as, pit wall stability analysis and hydrogeology assessment. This will be an ongoing annual cost of approximately US\$ 30,000.
- The resource model should be updated by integrating additional validated coal sample analysis data, geological and geotechnical findings from exposures of mine pits to enhance the development of a detailed monthly production schedule and reserve database. No cost impact.
- A study should be commenced to evaluate the procurement of mining equipment from neighboring countries like China for a lower transport cost and steady and timely supply of parts. No cost impact if implemented by SGS's personnel.
- With the cooperation agreement in place with MAK in relation to stripping within MAK's property, it is recommended that SGS should establish an effective communication channel and relationship with MAK such that SGS can regularly

update MAK of the details of the mine plan to carry out stripping within the MAK's property in a timely manner. No cost impact.

- Reconciliation between planned and actual production should be continued as a good mining practice. This will be an ongoing annual cost of approximately US\$ 20,000.

26.6 COAL PROCESSING

- Characterization and assessment of the coal quality of individual coal seams should be continued in an ongoing basis to develop a better understanding of the spatial distribution of coal quality of the pit and within individual seams. This should be done particularly for Seam No. 5, which offers the best quality of coal products and contributes to most of the production. Ongoing coal quality characterization may also benefit the processing strategy and hence, a better product mix for SGS. This will be an ongoing annual cost of approximately US\$ 20,000.
- The grid size of the screening on the hopper has a significant impact not only on the production of clean coal but also on its quality. It is important to ensure a steady and consistent feed of raw coal into the jig box, taking into consideration the size description and processing capabilities. To achieve feed stability, a mobile screen can be used to handle the Run of Mine (ROM) coal as WF (Wash Feed). This involves setting the screen aperture to match the size grid of the screening. By doing so, a steady and consistent feed can be achieved, which is crucial for optimal operation. Once a steady feed is achieved, the production of clean coal can be easily switched from one grade (WA) to another (WB), considering the desired clean coal ash level. This switch allows for running the process at high efficiency and reducing operation hours. The mobile screen is estimated to be US\$ 60,000.
- The performance of jigging separation is closely tied to the discharging capacity. However, the processing circuits' capacity and the grade of clean coal quality have been hindered by the insufficient capacity of the secondary bucket elevator. To address this issue and improve the overall performance, it is recommended to upgrade the capacity of the secondary bucket elevator to match the size of the first elevator.

By doing so, the processing circuits' capacity can be increased, allowing for a higher volume of coal to be processed. The upgrading cost is estimated to be US\$98,000.

- It has been observed that the fine clean coal circuit had to be closed due to dewatering issues in the tailing treatment process. As a result, the product obtained from the fine circuits consists mostly of original slime. The fine coal product from the fine circuits is still raw fine coal. It is believed that the fine coal product could not be qualified for any of A Coal, A⁻ Coal and B Coal, since there is no fine coal separation. To address this challenge and ensure efficient processing of the fine coal, it is recommended to initiate a technical study that focuses on finding an effective and practical solution. This study should aim to optimize the processing of fine coal and overcome the dewatering issues encountered in the tailing treatment. The estimated cost for the study is \$20,000.
- Adequate water supply is essential to ensure the efficient performance of clean coal production. By integrating slurry and water treatment into the operation, it becomes possible to optimize water usage, reduce wastage, and ensure the efficient performance of clean coal production. It is necessary to apply high-efficiency thickener prior to the fine coal processing since it can be very helpful for the clean coal production in the wash plant. This approach promotes sustainable water management practices and helps mitigate the impact on local water resources. The estimated cost for the upgrading of the thickening circuits is estimated to be US\$80,000.
- To maximize revenue and optimize the clean coal product in the plant, it is essential to consider the coking properties and ash contents of different coal grades. In addition to coking properties and ash contents, other factors such as market demand, customer preferences, and pricing trends should also be considered. It's important to note that the optimal clean coal product mix may vary based on market conditions and the specific characteristics of A Coal, A⁻ Coal and B Coal. Regular monitoring and analysis of market dynamics and coal quality parameters are crucial for adjusting the production strategy and maximizing revenue from clean coal products. No cost impacts.
- In the ROM sorting section and coal product strategy, the focus is on maximizing production efficiency based on the characteristics of the raw coal. The goal is to

achieve higher clean coal product and clean coal yield by considering coking properties, ash content, and specific gravity of the coal. The optimization of clean coal production should not be limited to the processing circuits alone. The entire coal product in the mine, including A Coal, A⁻ Coal and B Coal, should be considered. By integrating the ROM sorting section and processing circuits with the total coal product strategy, the overall clean coal yield and quality can be improved leading to higher efficiency and improved revenue generation. No cost impact for the production efficiency improvement.

- The presence of coal dust on the ground at the air jet plant, resulted from the separating and handling processes, presents an opportunity to explore its potential for utilization. Further study and analysis of this dust, in conjunction with the fine clean coal mentioned earlier, can help identify potential uses and determine the most effective methods for harnessing the calorific value of the dust. The cost for the study is estimated to be US\$50,000.

27. REFERENCES

AMC Mining Consulting and Services (AMC), 2023. Clarification of the technical and economic feasibility study of the Ovoot Tolgoi Coal Deposit by Open Pit Mining, Gurvantes Sum, Umnugobi, Mongolia. (translated from Mongolian document)

Aquaterra, 2010. Ovoot Tolgoi Water Supply - Phase 1 Scoping Study Ausenco Taggart 2012 Summary Report of Coal Handling Facility.

Aquaterra, 2012. Findings From Groundwater Exploration Works Undertaken In The Tooroin Shand Area (Estimated Exploitable Groundwater Reserves) For Supply To The Ovoot Tolgoi Mine (July 2012).

BAW Mineral Partners, 2022. Qualified Persons Report of the Ovoot Tolgoi Coal Mine located in South Gobi Province, Mongolia.

Canadian Securities Administrators, 2011. National Instrument 43-101 Standards of Disclosure for Mineral Projects Policy Document.

Canadian Securities Administrators, 2011. Companion Policy 43-101CP. Policy Document.

Canadian Securities Administrators, 2011. Technical Report Form 43-101F1. Policy Document.

CIM Standing Committee on Reserve Definitions, November 2010. CIM Definition Standards for Mineral Resources and Mineral Reserves.

CIM Standing Committee on Reserve Definitions, October 2004. Exploration Best Practices Guidelines: Included in CIM Standards on Mineral Resources and Reserves - Definitions and Guidelines. CIM Bulletin, v. 93, no. 1044, pp. 53-61.

Dashkhorol, J., Baatar, G., Dashdondov, J., and Orgil, D., 1992. Report on results of prospecting and detailed exploration of Nariin Sukhait black coal deposit in Gurvantes Soum of Umnugobi Aimag /resource estimation as of January 1, 1992, Ulaanbaatar.

Dashtsren, D. and Jagar, S., 1971. Report on results of prospecting-revision work done by geological team #5 on coal in OmonogobiAimag, Ulaanbaatar.

Dragon Mining Consulting Ltd., 2017. NI 43-101 Technical Report for the Ovoot Tolgoi Coal Mine in South Gobi Province, Mongolia.

ENCO Co Ltd, 2006. Report of the Detailed Environmental Impact Assessment for "Nariin Sukhait Coal Deposit Mining Project". (translated from Mongolian document)

ENCO Co Ltd, 2007. Addendum to The Detailed Environmental Impact Assessment for the Ovoot Coal Project. (translated from Mongolian document)

Erdenetsogt, B.-O., Lee, I., Bat-Erdene, D., & Luvsanchultem, J., 2009. Mongolian coal-bearing basins: Geological settings, coal characteristics, distribution, and resources. International Journal of Coal Geology.

Euro Asian Mines Company, 2022. The Technical and Economic Basis of Using the Northwest Part of Nariin Sukhait Coal Deposit in the Umnugobi Province Through Open Pit Mining.

Graham, S.A., Hendrix, M.S., Johnson, C.L., Badamgarav, D., Badarch, G., 2001. Sedimentary record and tectonic implications of Mesozoic rifting in southeast Mongolia. Geological Society of America Bulletin, v. 113, no. 12, p. 1560-1579.

Hendrix, M.S. et al., 1996. Noyon Uul syncline, southern Mongolia: Lower Mesozoic sedimentary record of the tectonic amalgamation of central Asia. Geological Society of America Bulletin, v. 108, no. 10, p1256- 1274.

Hendrix, M.S. et al., 2001. Triassic synorogenic sedimentation in southern Mongolia: early effects of intercontinental deformation. Geological Society of America Memoir 194, p389-412.

Huebeck, C., 2001. Assembly of central Asia during the middle and late Paleozoic. Geological Society of America Memoir 194 p.1-21.

Hughes, J.D., Klatzel-Mudry, L., and Nikols, D.J., 1989. A Standardized Coal Resource/Reserve Reporting System for Canada", Geological Survey of Canada Paper 88-21.
ITSR, Tamaska O&G Ltd and Telmen Energy Ltd., 2021. Independent Technical Specialist Report.

Klinowski, G. W., 2007. Ovoot Tolgoi Project, Underground Mine Plan, Hydraulic Mining Concept.

Lamb, M.A., and Badarch, G., 2001. Paleozoic sedimentary basins and volcanic arc systems of southern Mongolia: New geochemical and petrographic constraints. Geological Society of America Memoir 194, p.117-149.

MGECS (Make Green Environmental Consulting Services), 2023. Additional clarification report on the detailed environmental impact assessment of the Nariin Sukhait Coal Deposit by open-pit mining. (translated from Mongolian document)

Meng, Q.R., Hu, J.M., Jin, J.Q., Zhang, Y., and Xu, D.F., 2003. Tectonics of the late Mesozoic wide extensional basin system in the China-Mongolia border region. Basin Research, v.15, p. 397-415.

Mineral Resources and Petroleum Authority of Mongolia, 2003. Coal and oil shale deposits and occurrences of Mongolia.

Norwest Corporation, 2006. Groundwater and Surface Water Hydrology Report, Nariin Sukhait 2006 Investigation, Mongolia.



Norwest Corporation, 2007a. Technical Report, Coal Geology and Resources, Narin Sukhait Property, Omnogovi Aimag, Mongolia.

Norwest Corporation, 2007b. Technical Report of Ovoot Tolgoi Underground Mining Potential.

Norwest Corporation, 2007c. Technical Report of Coal Geology and Resources, Ovoot Tolgoi Property, Omnogovi Aimag, Mongolia.

Norwest Corporation, 2009. Ovoot Tolgoi Preliminary Feasibility Study (Volumes 1, 2 & 3).

Norwest Corporation, 2009. Technical Report of Coal Geology, Resources and Reserves Ovoot Tolgoi: A Production Property. Omnogovi Aimag, Mongolia.

P.E.A.T. (Aust) Pty Ltd, 2011. Qualified Person's Report on a Pre-Feasibility Coal Processing Study for South Gobi Sands.

RungePincockMinarco (formerly MinarcoMineConsult), 2011. Technical Report of Coal Geology and Resources and Reserves, Ovoot Tolgoi Complex, Mongolia.

RungePincockMinarco (formerly MinarcoMineConsult), 2012. NI 43-101 Technical Report of Coal Geology and Resources and Reserves, Ovoot Tolgoi Complex, Mongolia.

RungePincockMinarco, 2016. NI 43-101 Technical Report of Resource Estimate, Coal Geology and Resources, Ovoot Tolgoi Complex, Mongolia.

Seedsman Geotechnics, 2011. South Gobi Sands - Geotechnical Assessment Seedsman Geotechnics, 2012 Pit Design Parameters for 2012 Pit Designs SGS North America Inc., 2012 Engineering Report on Ejina Jinda Wash Plant.

SouthGobi Energy Resources, 2009. Technical Report: Coal Geology and Resources, Ovoot Tolgoi Project, Omnogovi Aimag, Mongolia.



SouthGobi Energy Resources, 2013. Annual Information Form.

The Americas Group, 2008. Technical Report: Surface Coal Geology and Resources, Ovoot Tolgoi West Field, Omnogovi Aimag, Mongolia.

The Americas Group, 2008. Technical Report: Underground Resources at Ovoot Tolgoi Sunset Field, Omnogovi Aimag, Mongolia.

Valtech, 2024. Coal Price Research Report: Coal price forecast analysis for 4 types of coals for 2023 to 2042 for 3 targeted markets: Wuhai, Jiayuguan and Jinchang.

Volkhonina, V.S., 1952. Report on geological and hydrogeological mapping at the scale of 1:500000 in South Gobi, People's Republic of Mongolia, Ulaanbaatar.

28. APPENDIX

APPENDIX A – GLOSSARY AND DEFINITION

ad	refers to air dried
as	refers to as received
Ash	refers to the ash content of coal
BCM	stands for bank cubic metre
cal/g	refers to calories per gram
Company	means SouthGobi Resources Ltd "SQR" or "the Client"
CSN	stands for Crucible Swelling Number which is a measure of increase in the volume of coal when heated, with the exclusion of air. This parameter is useful in evaluating coal for coking and combustion.
CV	stands for Calorific Value which is a measure of the amount of energy produced from a unit weight of coal when it is combusted in oxygen
daf	refers to dry ash free basis
db	refers to dried basis
Element	Chemical symbols used in this report Al – Aluminium Au – Gold

Ag – Silver
As – Arsenic
Ba – Barium
Cu – Copper
Fe – Iron
K – Potassium
Mg – Magnesium
Mn – Manganese
Na – Sodium
O - Oxygen
Pb – Lead
S – Sulphur
Si – Silicon
Sr – Strontium
Ti – Titanium
Zn – Zinc

Exploration Target/Results

includes data and information generated by exploration programs that may be of use to investors. The reporting of such information is common in the early stages of exploration and is usually based on limited surface chip sampling, geochemical and geophysical surveys. Discussion of target size and type must be expressed so that it cannot be misrepresented as an estimate of Mineral Resources or Ore Reserves

FC

refers to Fixed Carbon which is that portion of coal that remains as residue after volatile matter distills off, after the sum of moisture and ash content in the coal is subtracted

FSI	refers to Free Swelling Index which is a measure of the increase in volume of coal when heated under specified conditions
G	refers to Caking Index which is a measure of the magnitude of the binding strength between coal particles or between coal particles and inert particles after coal is heated at 850 °C
g/mm³	refers to grams per cubic millimeter
GPS	stands for Global Positioning System
GSC	refers to Geological Survey of Canada
IM	refers to Inherent Moisture which is the moisture content of coal
In-situ	means rock or mineralization in place in the ground
Indicated Mineral Resource	is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed

Inferred Mineral Resource

is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Kcal

stands for kilocalorie

Km

stands for kilometre

Kt

stands for thousand tonnes

M

stands for metres

MAK

refers to Mongolyn Alt Corporation

MNT

stands for Mongolian Tugriks currency unit

Measured Resource

is that part of a Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches,

pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity

Metallurgy

Physical and/or chemical separation of constituents of interest from a larger mass of material. Methods employed to prepare a final marketable product from material as mined. Examples include screening, flotation, magnetic separation, leaching, washing, roasting etc.

Modifying Factors

Modifying Factors means the considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

mRL

means metres above sea level

Mt

stands for million tonnes

Mtpa

means million tonnes per annum

NI 43-101

means Canadian National Instrument 43-101

NPV

stands for Net Present Value

Open-pit

means open cut mining which is mining from a pit open to surface and usually carried out by stripping of overburden materials

**Ore**

is the portion of a reserve from which a metal or valuable mineral can be extracted profitably under current or immediately foreseeable economic conditions

PFS

stands for Preliminary Feasibility Study

Probable Reserve

A Probable Reserve is the economically mineable part of an Indicated and, in some circumstances, a Measured Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

Proven Reserve

A Proven Reserve is the economically mineable part of a Measured Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

Qualified Person (QP)

A Qualified Person means an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report; and is a member or licensee in good standing of a professional association.

Regolith	is a geological term for a cover of soil and rock fragments overlying bedrock
Reserve	is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Reserve includes diluting materials and allowances for losses that may occur when the material is mined
Resource	A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.
RL	means Reduced Level, an elevation above sea level
RMB	stands for Chinese Renminbi currency unit
RMB/t	stands for Chinese Renminbi per material tonne
RPM	refers to RungePincockMinarco Ltd or formerly MinarcoMineConsult

Saprolite	is a geological term for weathered bedrock
SG	stands for specific gravity
sq.km or km²	stands for square kilometre
Strip Ratio	refers to the ratio of the volume of overburden (or waste material) required to be handled in order to extract some tonnage of ore.
T	stands for tonne
TM	refers to total moisture content of coal
Tonne	refers to metric tonne
Tpa	stands for tonnes per annum
Tpd	stands for tonnes per day
TS	stands for Total Sulfur
UG	means underground mining which is an opening in the earth accessed via shafts, declines or adits below the land surface to extract minerals
US\$	stands for United States dollars
VM	stands for volatile matter of coal, representing the components of coal, except for moisture, which is liberated at high temperature in the absence of air



WF

stands for Wash Feed which is the coal fed to the washing plant

Yuan

stands for the currency of People's Republic of China



APPENDIX B – CERTIFICATE OF QUALIFIED PERSON

I, Jaydee Ammugauan, Professional Geologist with BAW Mineral Partners Limited of Rm1603, Mega Trade Centre, 1 Mei Wan Street, Tsuen Wan, Hong Kong, and one of the authors of the Technical Report for the Ovoot Tolgoi Coal Mine, South Gobi Province, Mongolia, prepared for SouthGobi Resources Ltd. with an effective date of December 31, 2023, dated December 2, 2024 (the "Technical Report"), hereby certify that:

1. I am a member of the Australasian Institute of Geoscientists (MAIG #8803)
2. I graduated with a degree of Bachelor of Science in Geology from the University of the Philippines, Diliman in 2002. In addition, I obtained a Diploma in Environment and Natural Resources Management from the University of the Philippines, Los Banos in 2019.
3. My relevant experience includes 21 years combined in field exploration, mining, project evaluation for precious metal, base metal, nickel and coal projects in Philippines, Cambodia, Australia, Kazakhstan, Indonesia, and Mongolia. I have been involved with coal exploration and resource estimation since 2003.
4. I am a Qualified Person for the purposes of the National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101").
5. I visited and inspected the Sunset and Sunrise Pits of the Ovoot Tolgoi Deposit between the dates February 28 to March 6, 2024. Subsequent field visit was made in B Field between the dates August 23-25, 2024.
6. I am responsible for the preparation and the supervision of Summary (Section 1), Introduction (Section 2), Reliance on Other Experts (Section 3), Property Description (Section 4), Accessibility and Climate (Section 5), History (Section 6), Geological Setting and Mineralization (Section 7), Deposit Types (Section 8), Exploration (Section 9), Drilling (Section 10), Sample Preparation (Section 11), Data Verification (Section 12), Resource Estimation (Section 14), Environmental Studies (Section 20), Adjacent Properties (Section 23), Other Relevant Data and Information (Section 24), Interpretation and Conclusion (Section 25), Recommendations (Section 26) and References (Section



- 27) of the Technical Report in accordance with the NI 43-101 for the property.
7. I am independent of SouthGobi Resources Ltd. in accordance with the application of Section 1.5 of NI 43-101.
 8. I have had no prior involvement with the property that is the subject of the Technical Report.
 9. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance with that instrument and form.
 10. That, at the effective date of the Technical Report, to the best of my knowledge, information, and belief, those parts of the Technical Report that I am responsible for, contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Hong Kong, this 2nd day of December, 2024.

A handwritten signature in black ink, reading "Jaydee B. Ammugauan", written over a horizontal line.

Jaydee Ammugauan, MAIG



CERTIFICATE OF QUALIFIED PERSON

I, Tao Xu, Professional Engineer with BAW Mineral Partners Limited of Rm1603, Mega Trade Centre, 1 Mei Wan Street, Tsuen Wan, Hong Kong, and one of the authors of the Technical Report for the Ovoot Tolgoi Coal Mine, South Gobi Province, Mongolia, prepared for SouthGobi Resources Ltd. with an effective date of December 31, 2023, dated December 2, 2024 (the "Technical Report"), hereby certify that:

1. I am a Certified Professional Engineer of the Association of Professional Engineers of Ontario, Canada (Registration No. 100608576).
2. I graduated with a B.Eng. in Coal Geology and Exploration from the University of Xian Science and Technology of China in 1984, post-graduated with Civil Engineering from the University of Xian Architectural Science and Technology of China in 1997, and B.A.T. with Petroleum Engineering of the Southern Alberta Institute of Technology, Canada in 2004.
3. I have been continuously and actively engaged in the exploration, assessment, development, and mine plan of coal and related natural resource development projects since my graduation from university in 1984. I have experiences in work with coal exploration and mine development in British Columbia, Canada since 2009.
4. I am a Qualified Person for the purposes of the National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101").
5. I visited and inspected the Sunset and Sunrise Pits of the Ovoot Tolgoi Deposit between the dates February 28 to March 6, 2024.
6. I am responsible for the preparation and the supervision of Reserve Estimation (Section 15), Mining Method (Section 16), Project Infrastructures (Section 18), Market Studies and Contract (Section 19), Capital and Operating Costs (Section 21), Economic Analysis (Section 22), Interpretation and Conclusion (Section 25), Recommendations (Section 26) and References (Section 27) of the Technical Report in accordance with the NI 43-101



for the property.

7. I am independent of SouthGobi Resources Ltd. in accordance with the application of Section 1.5 of NI 43-101.
8. I have read NI 43-101 and Form 43-101F1 and those parts of the Technical Report I am responsible for have been prepared in compliance with that instrument and form.
9. That at the effective date of the Technical Report, to the best of my knowledge, information, and belief, that part of the Technical Report that I am responsible for contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Vancouver, Canada this 2nd day of December, 2024.

A handwritten signature in black ink, consisting of a large, stylized 'X' followed by a series of loops and a horizontal line at the end.

Tao Xu, P.Eng.



CERTIFICATE OF QUALIFIED PERSON

I, Larry Li, Professional Engineer with BAW Mineral Partners Limited of Rm1603, Mega Trade Centre, 1 Mei Wan Street, Tsuen Wan, Hong Kong, and one of the authors of the Technical Report for the Ovoot Tolgoi Coal Mine, South Gobi Province, Mongolia, prepared for SouthGobi Resources Ltd. with an effective date of December 31, 2023, dated December 2, 2024 (the "Technical Report"), hereby certify that:

1. I am a registered Professional Engineer of the Association of Professional Engineers and Geoscientists of British Columbia, Canada (APEGBC No. 35190).
2. I graduated with a B.Eng. in Heilongjiang University of Science and Technology of China in 1982 and majored in Mineral Processing.
3. I have been continuously and actively engaged in the coal processing and handling, including the engineering designs, project management and construction, and plant operation at mine site since 1982 in China and 2005 in British Columbia, Canada. I have more than 20 years of experience in work in relation to coal processing and handling.
4. I am a Qualified Person for the purposes of the National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101").
5. I visited and inspected the Sunset and Sunrise Pits of the Ovoot Tolgoi Deposit between the dates February 28 to March 6, 2024.
6. I am responsible for the preparation and the supervision of Mineral Processing and Metallurgical Testing (Section 13), Recovery Methods (Section 17), Interpretation and Conclusion (Section 25), Recommendations (Section 26) and References (Section 27) of the Technical Report in accordance with the NI 43-101 for the property.
7. I am independent of SouthGobi Resources Ltd. in accordance with the application of Section 1.5 of NI 43-101.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance with that instrument and form.
9. That, at the effective date of the Technical Report, to the best of my knowledge,



information, and belief, those parts of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Vancouver, Canada this 2nd day of December, 2024.

A handwritten signature in black ink, appearing to be "Larry Li", is written over a horizontal line.

Larry Li, P.Eng.



APPENDIX C – DETAILED COAL SEAM RESOURCE CLASSIFICATION

Plan-view maps of the resource estimation and classification of Seam Nos. 4, 5L, 5U, 6 and 7 of the Sunrise Pit are shown in Figure 28C-1 to Figure 28C-5.

Plan-view maps of the resource estimation and classification of Seam Nos. 5L, 5U, 8, 9 and 10 of the Sunset Pit are shown in Figure 28C-6 to Figure 28C-10.

Plan-view maps of the resource estimation and classification of Seam Nos. 6, 7, 8, 9 and 10 of the B Field are shown in Figure 28C-11 to Figure 28C-15.

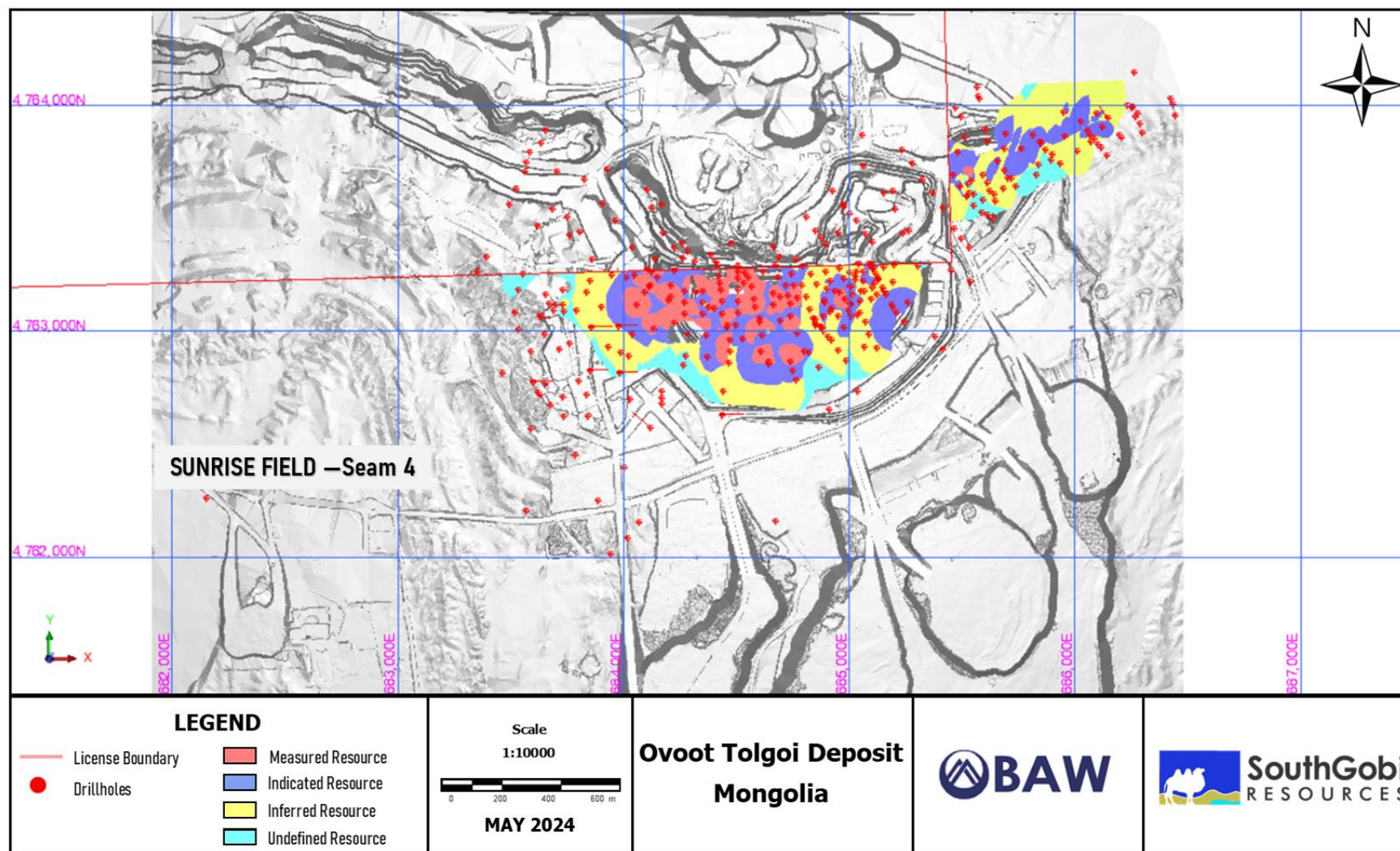


Figure 28C-1. Plan-view map of the resource estimation and classification of Seam No. 4 of the Sunrise Pit

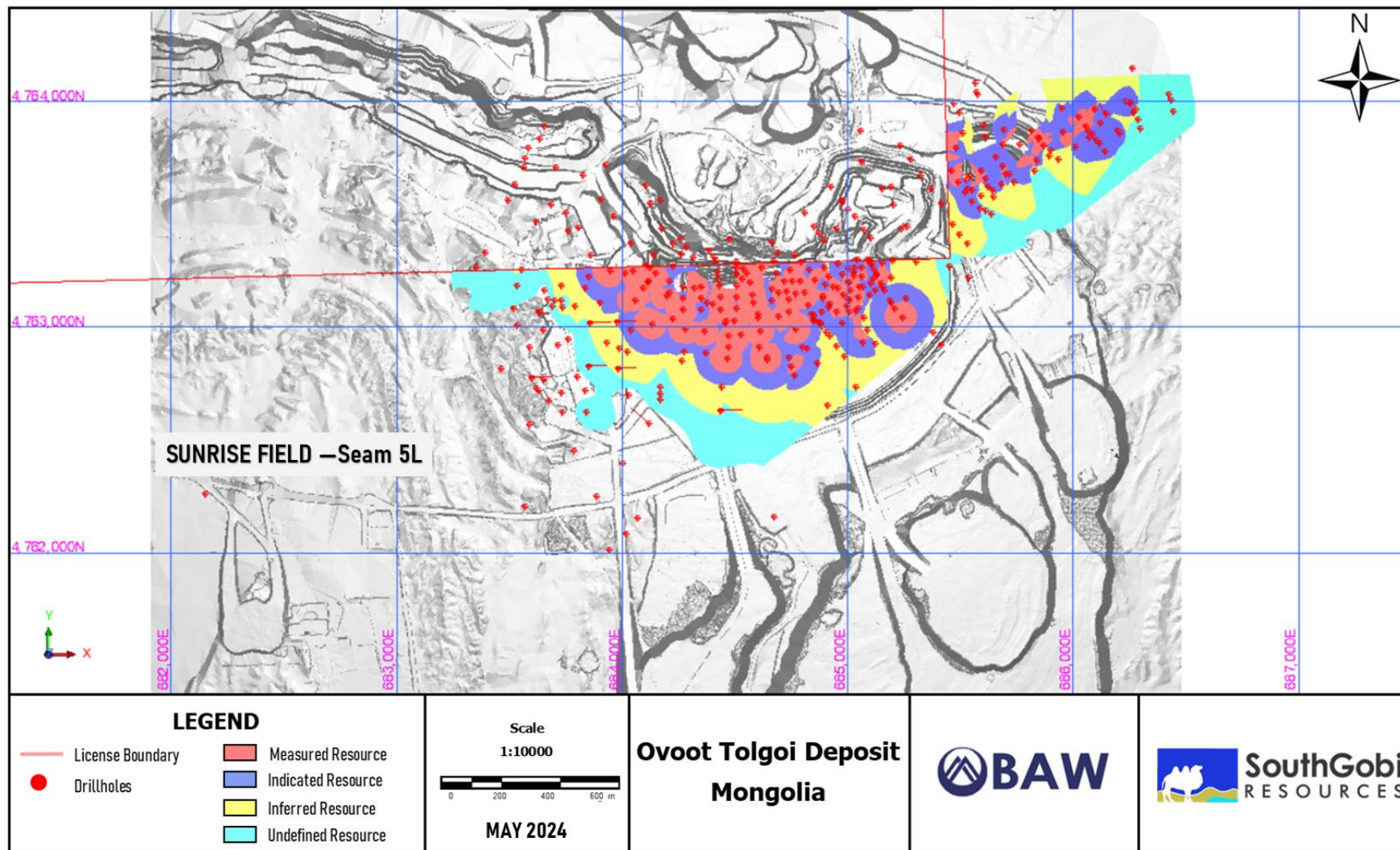


Figure 28C-2. Plan-view map of the resource estimation and classification of Seam No. 5L of the Sunrise Pit

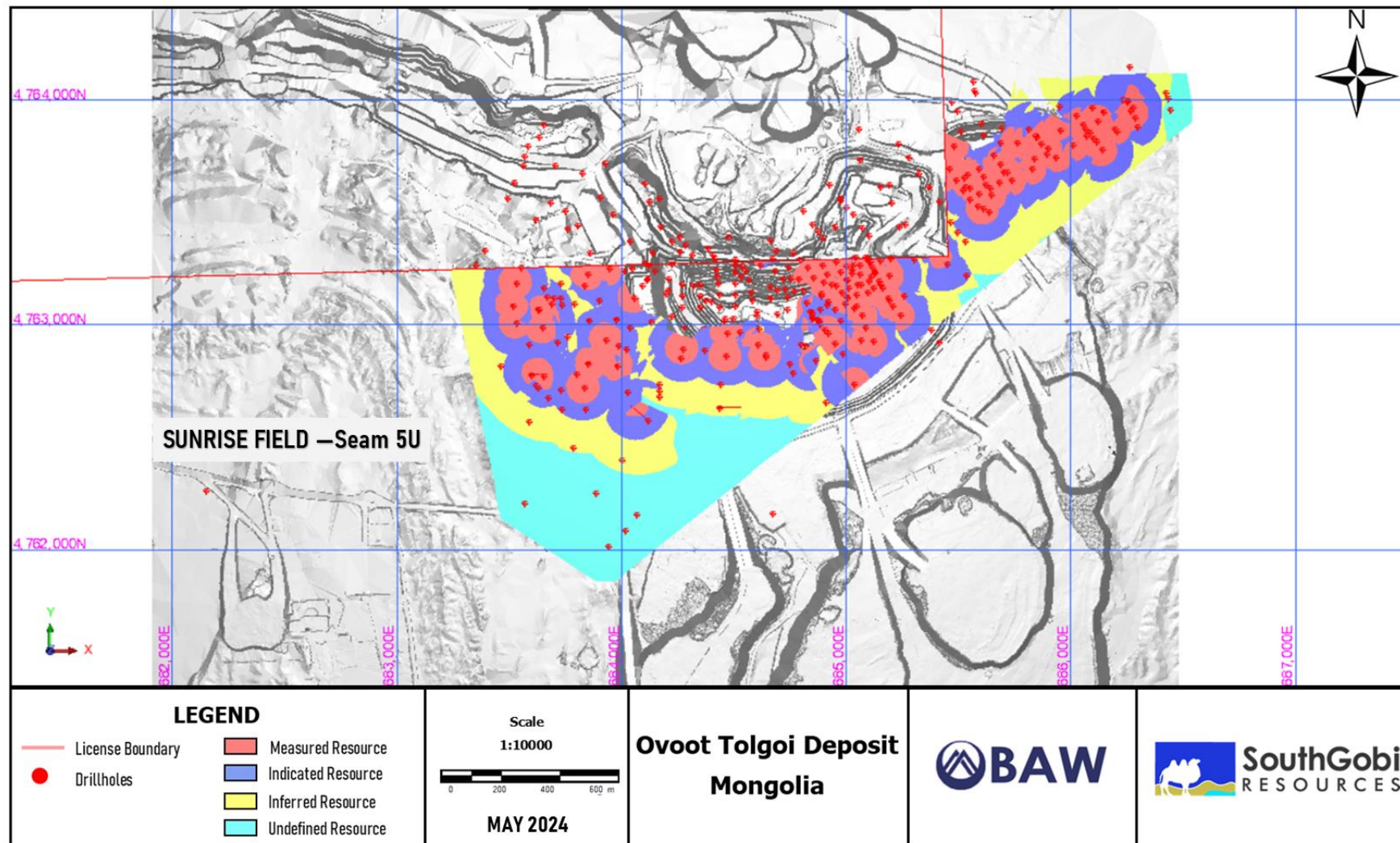


Figure 28C-3. Plan-view map of the resource estimation and classification of Seam No. 5U of the Sunrise Pit

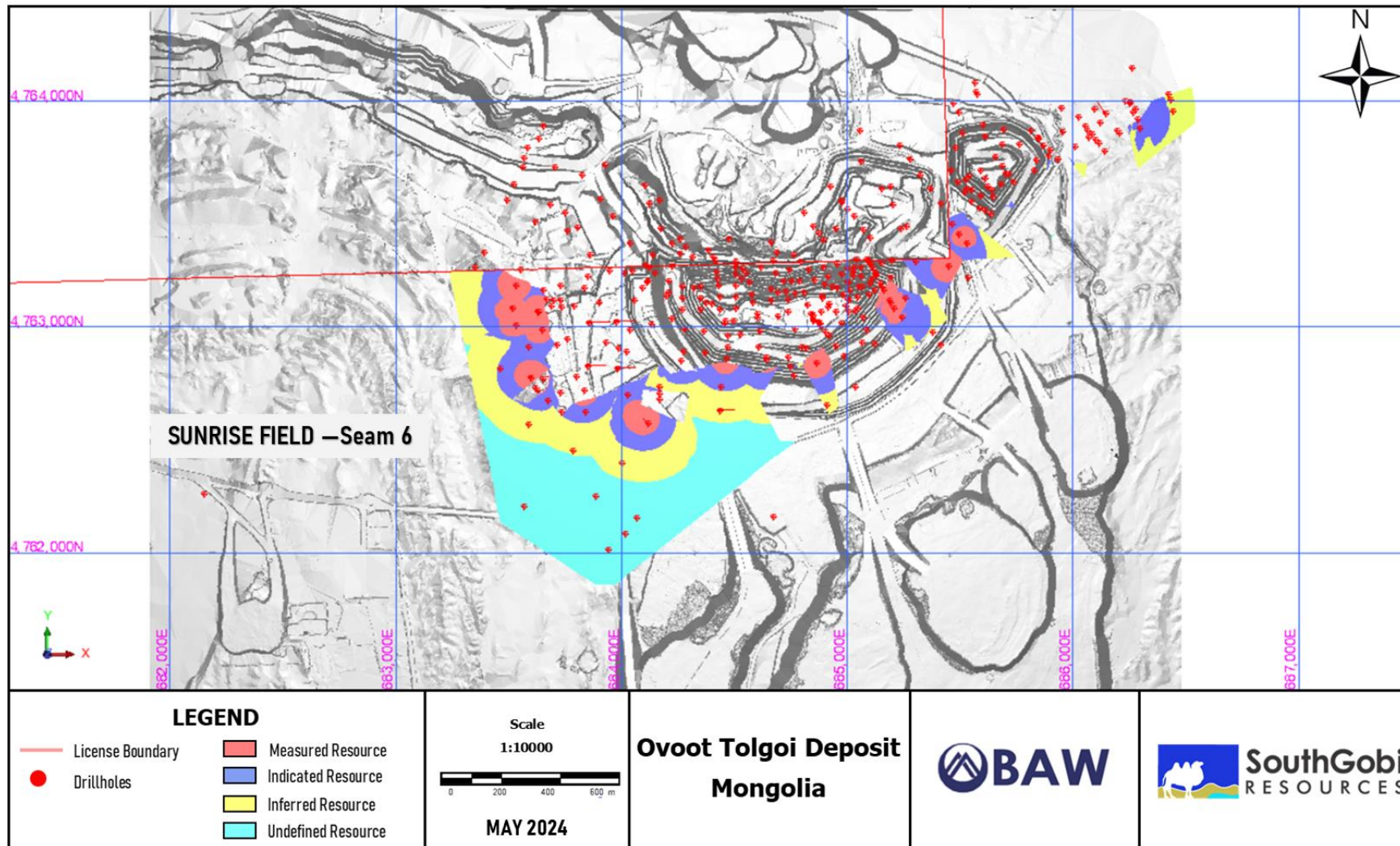


Figure 28C-4. Plan-view map of the resource estimation and classification of Seam No. 6 of the Sunrise Pit

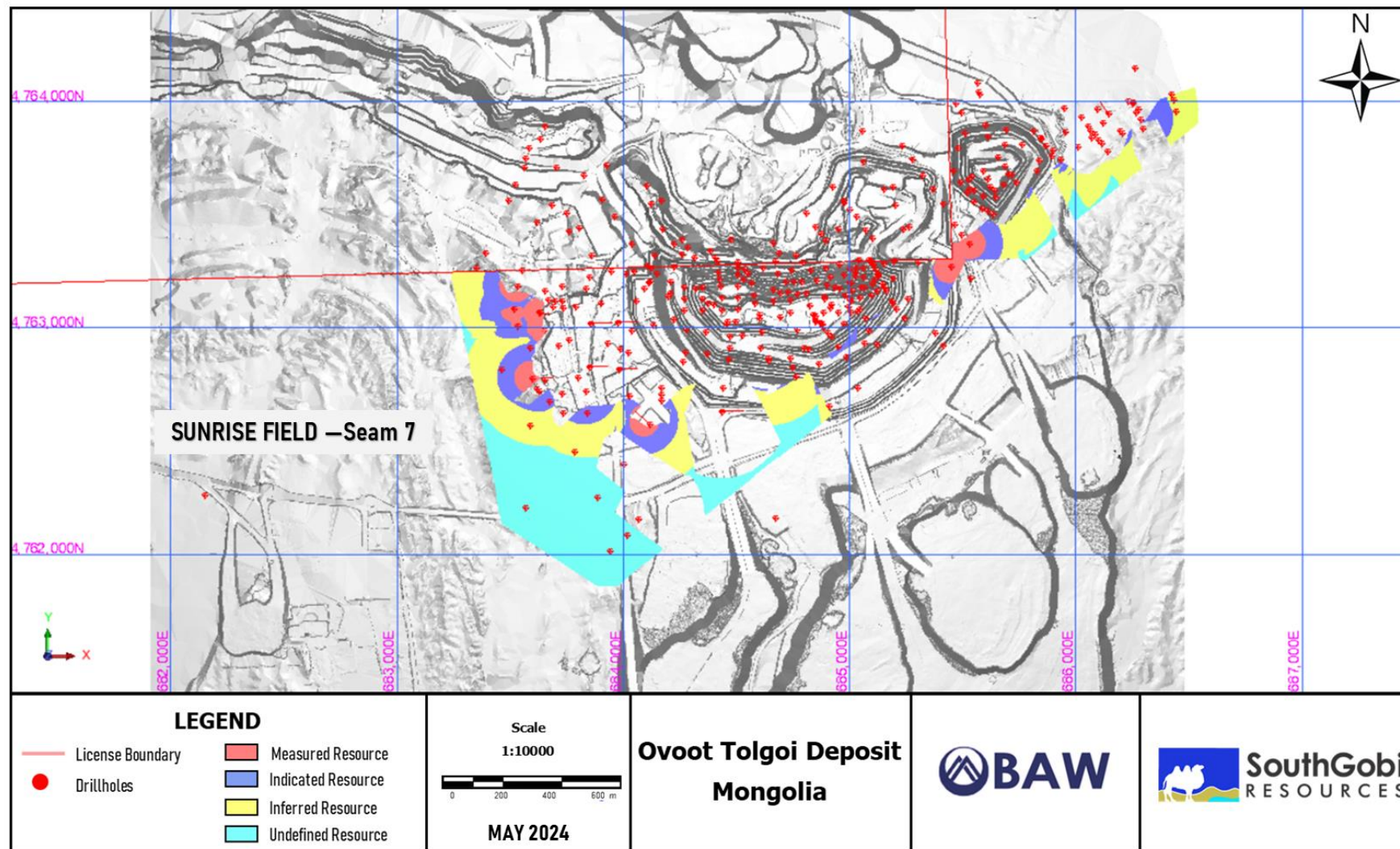


Figure 28C-5. Plan-view map of the resource estimation and classification of Seam No. 7 of the Sunrise Pit

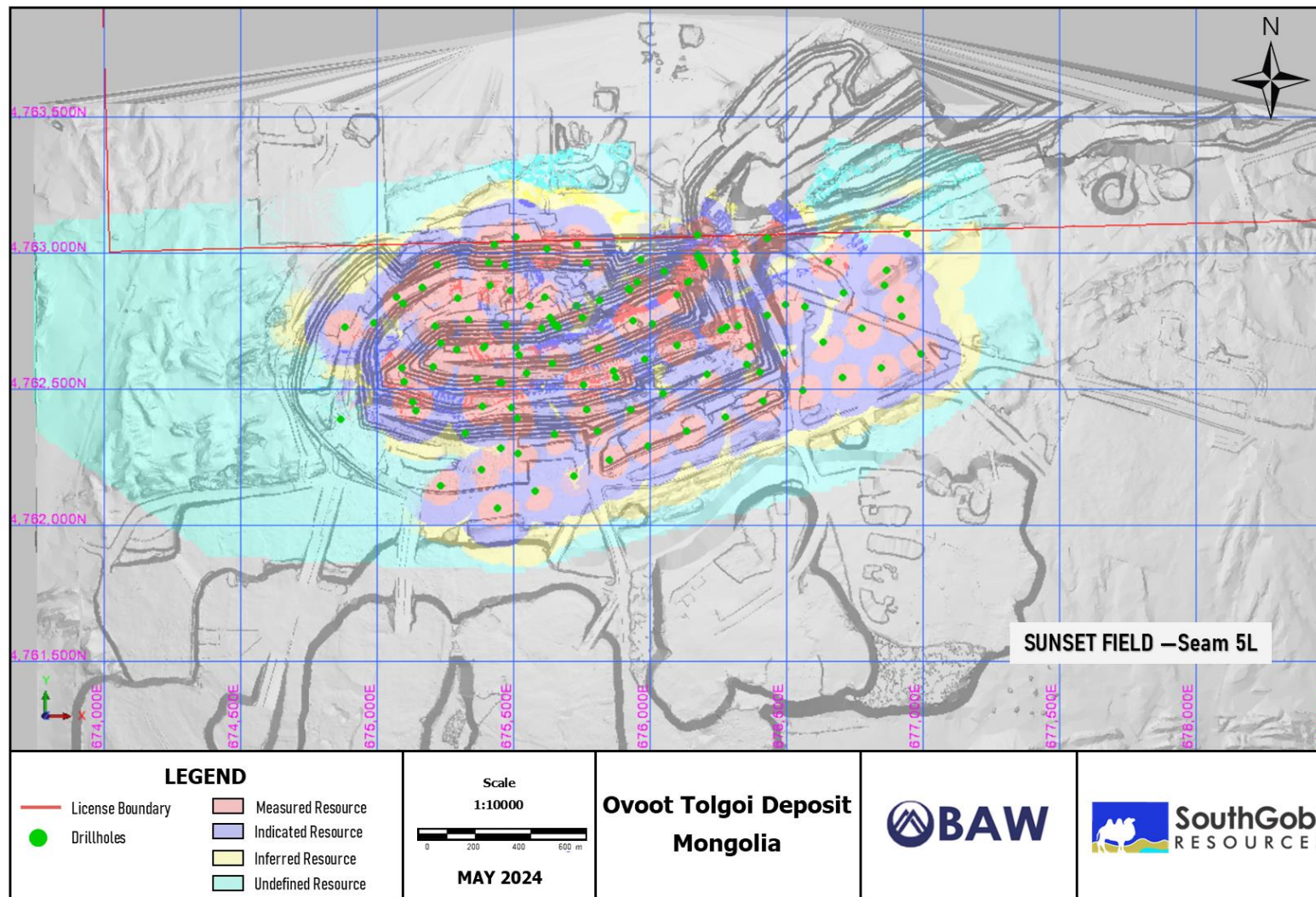


Figure 28C-6. Plan-view map of the resource estimation and classification of Seam No. 5L of the Sunset Pit

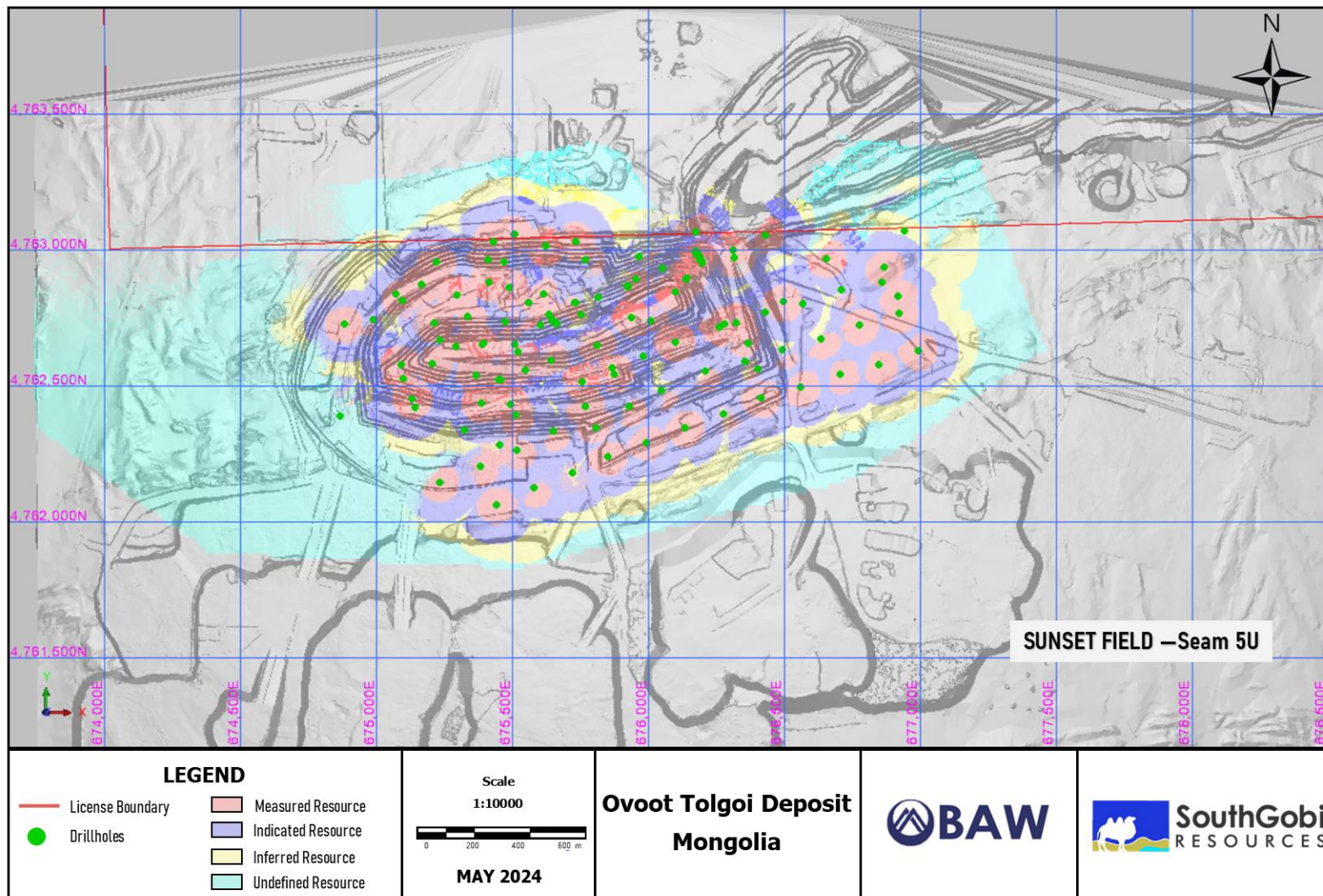


Figure 28C-7. Plan-view map of the resource estimation and classification of Seam No. 5U of the Sunset Pit

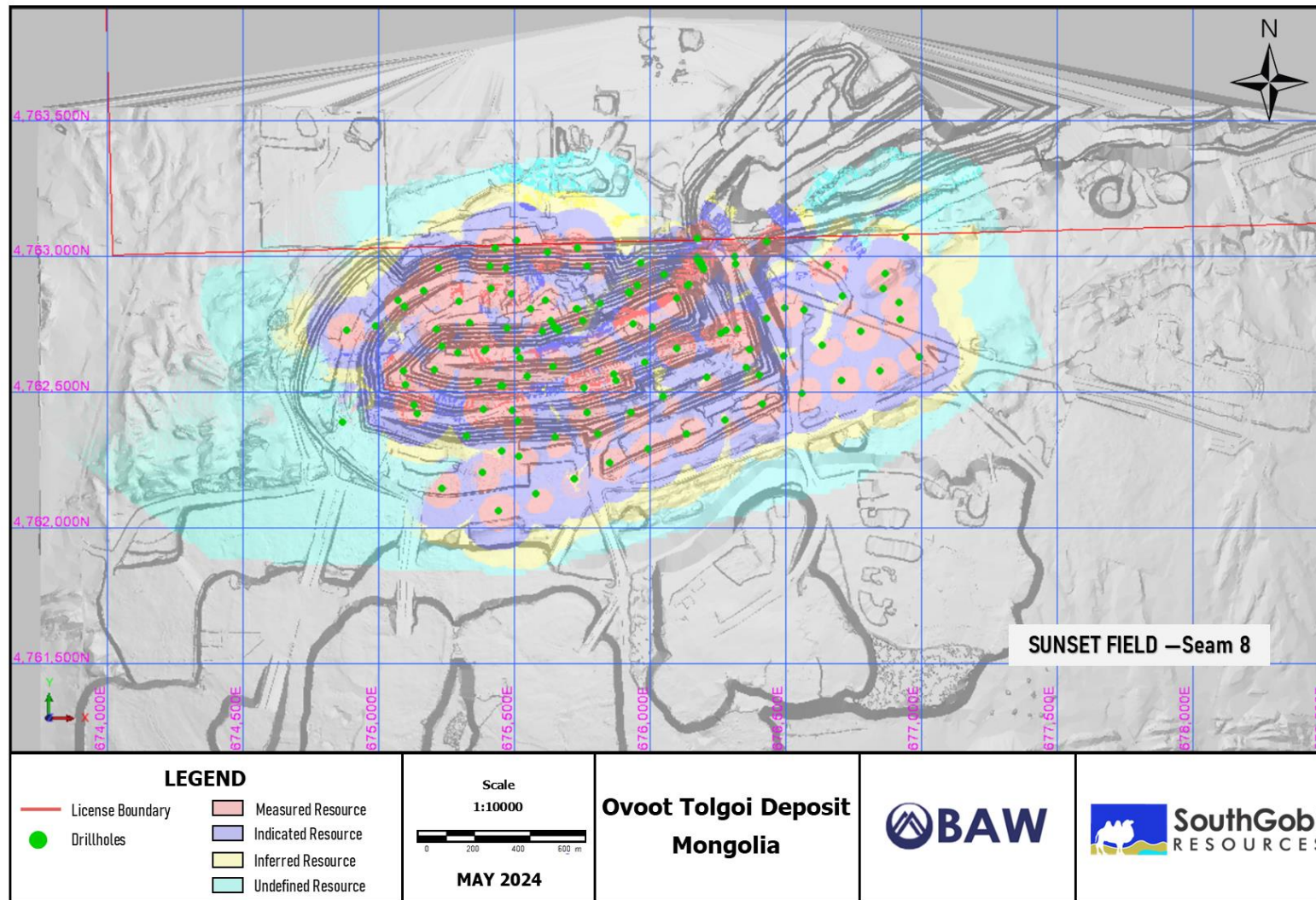


Figure 28C-8. Plan-view map of the resource estimation and classification of Seam No. 8 of the Sunset Pit

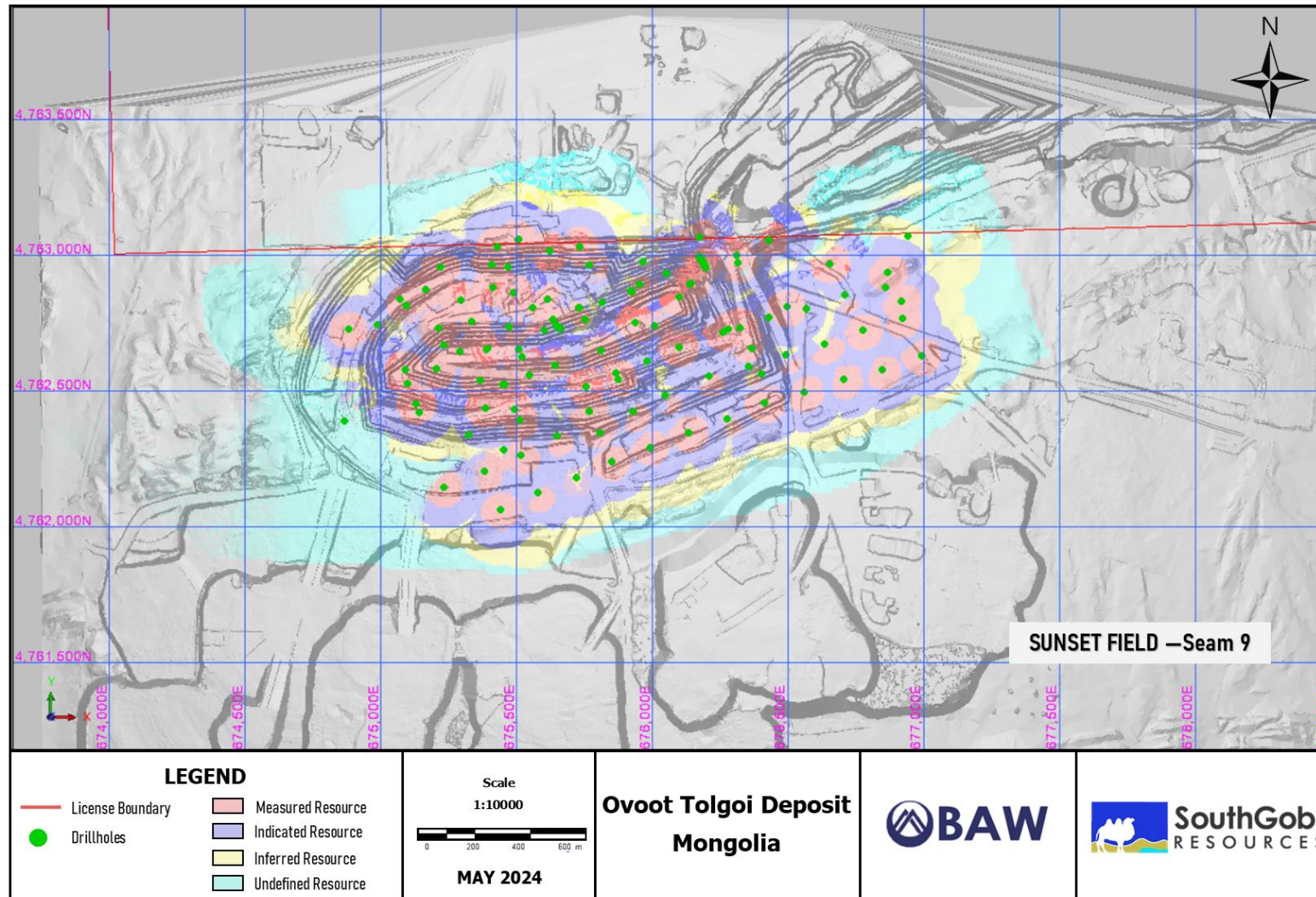


Figure 28C-9. Plan-view map of the resource estimation and classification of Seam No. 9 of the Sunset Pit

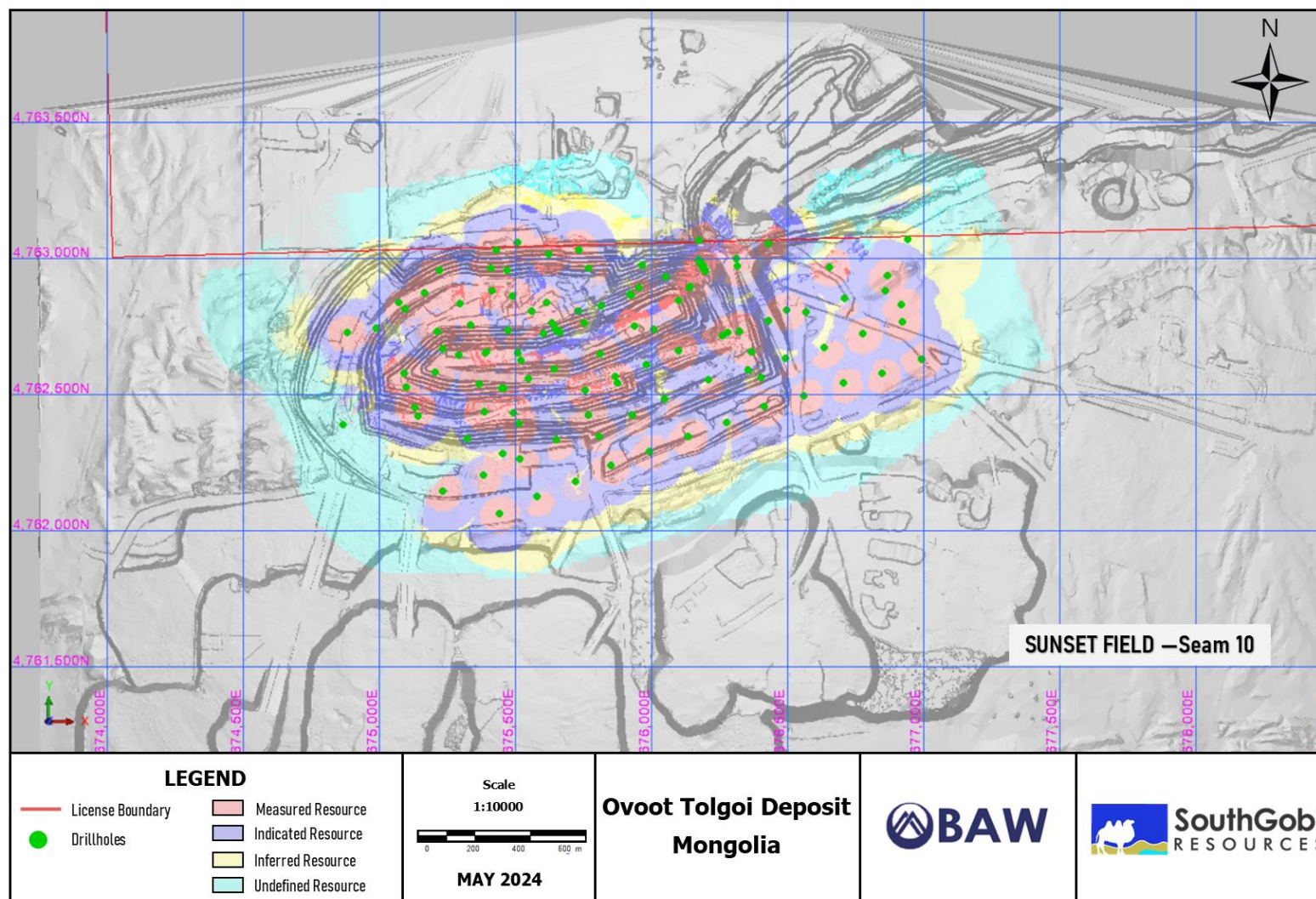


Figure 28C-10. Plan-view map of the resource estimation and classification of Seam No. 10 of the Sunset Pit

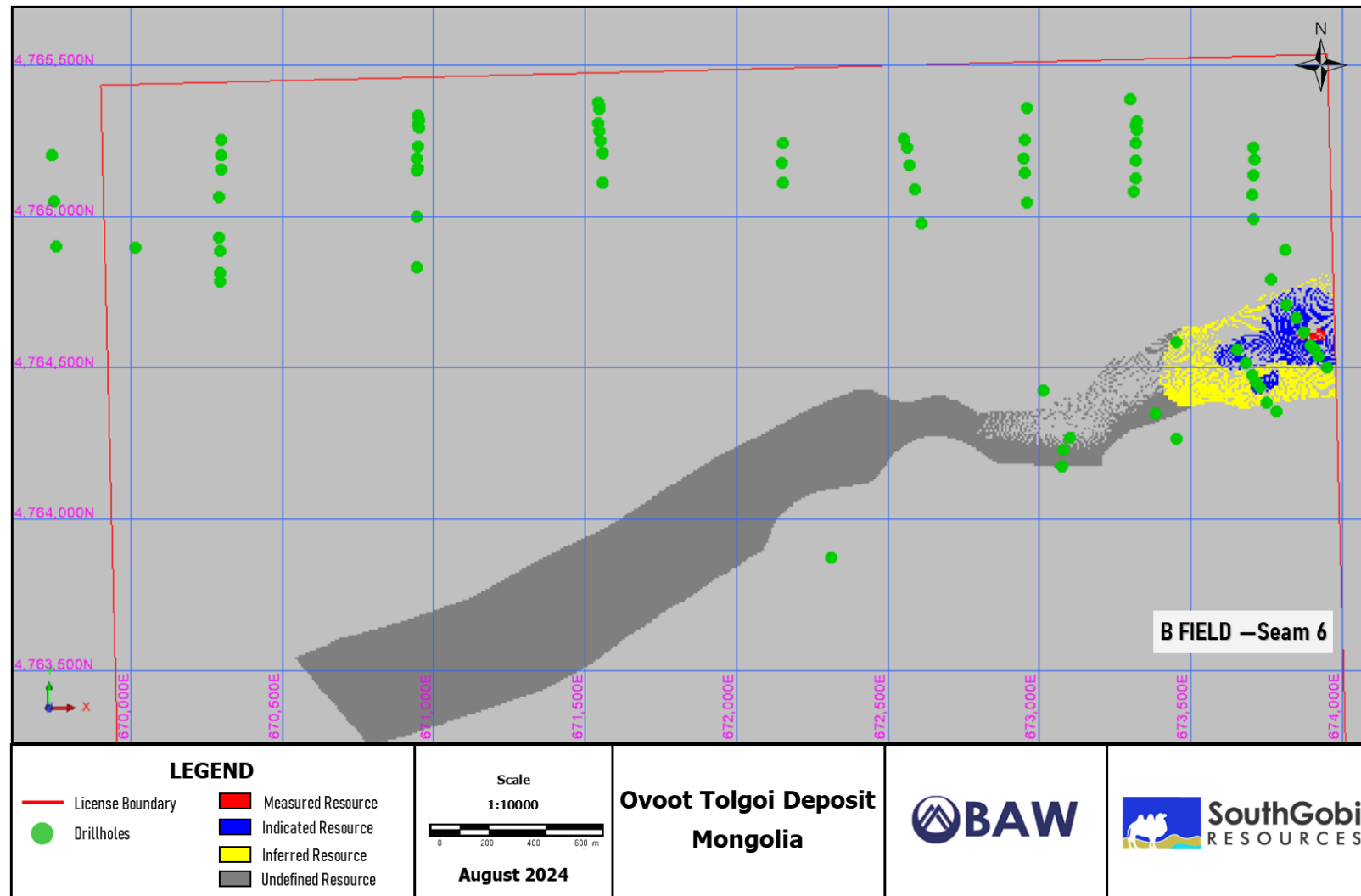


Figure 28C-11. Plan-view map of the resource estimation and classification of Seam No. 6 of B Field

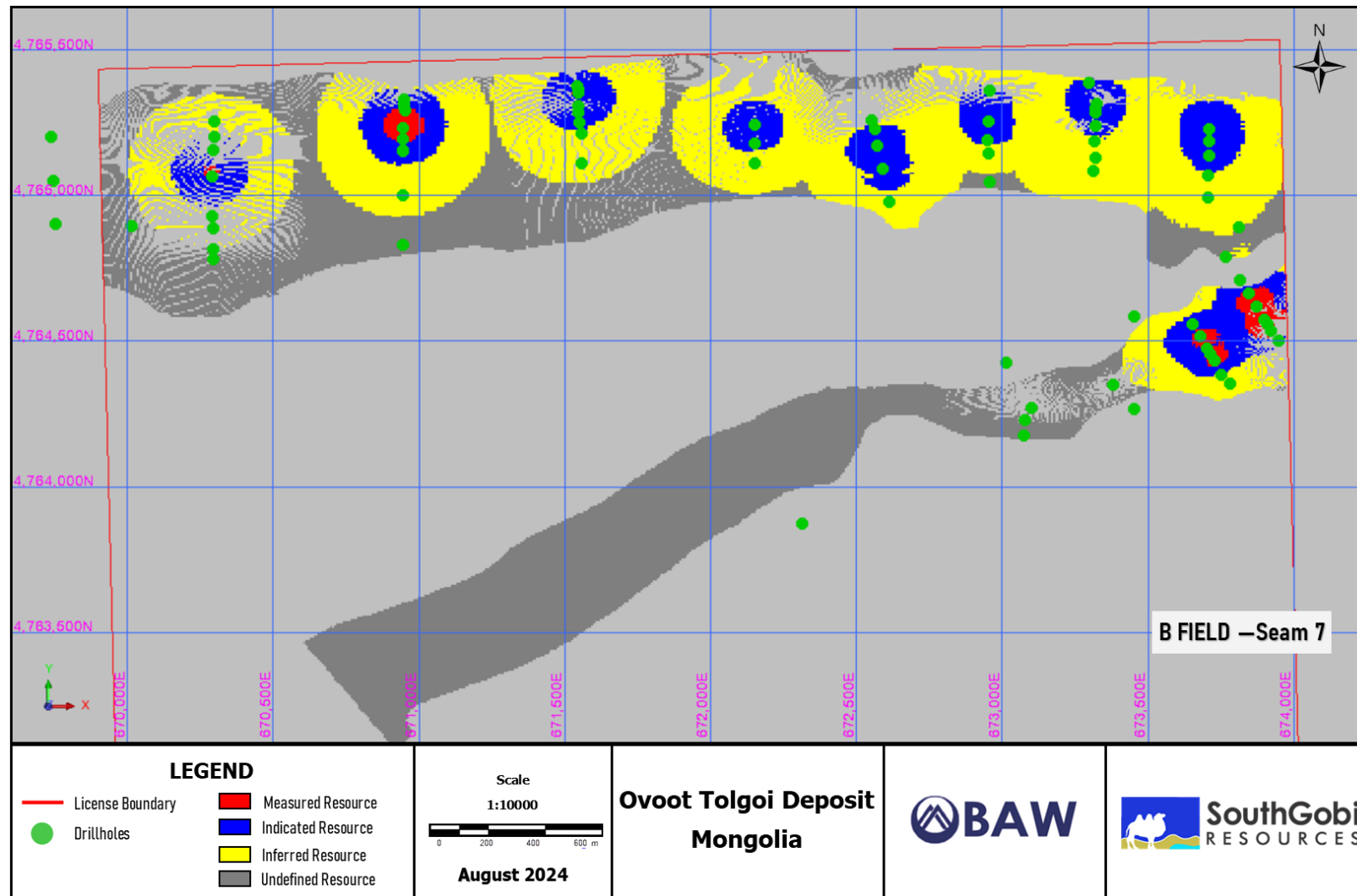


Figure 28C-12. Plan-view map of the resource estimation and classification of Seam No. 7 of B Field

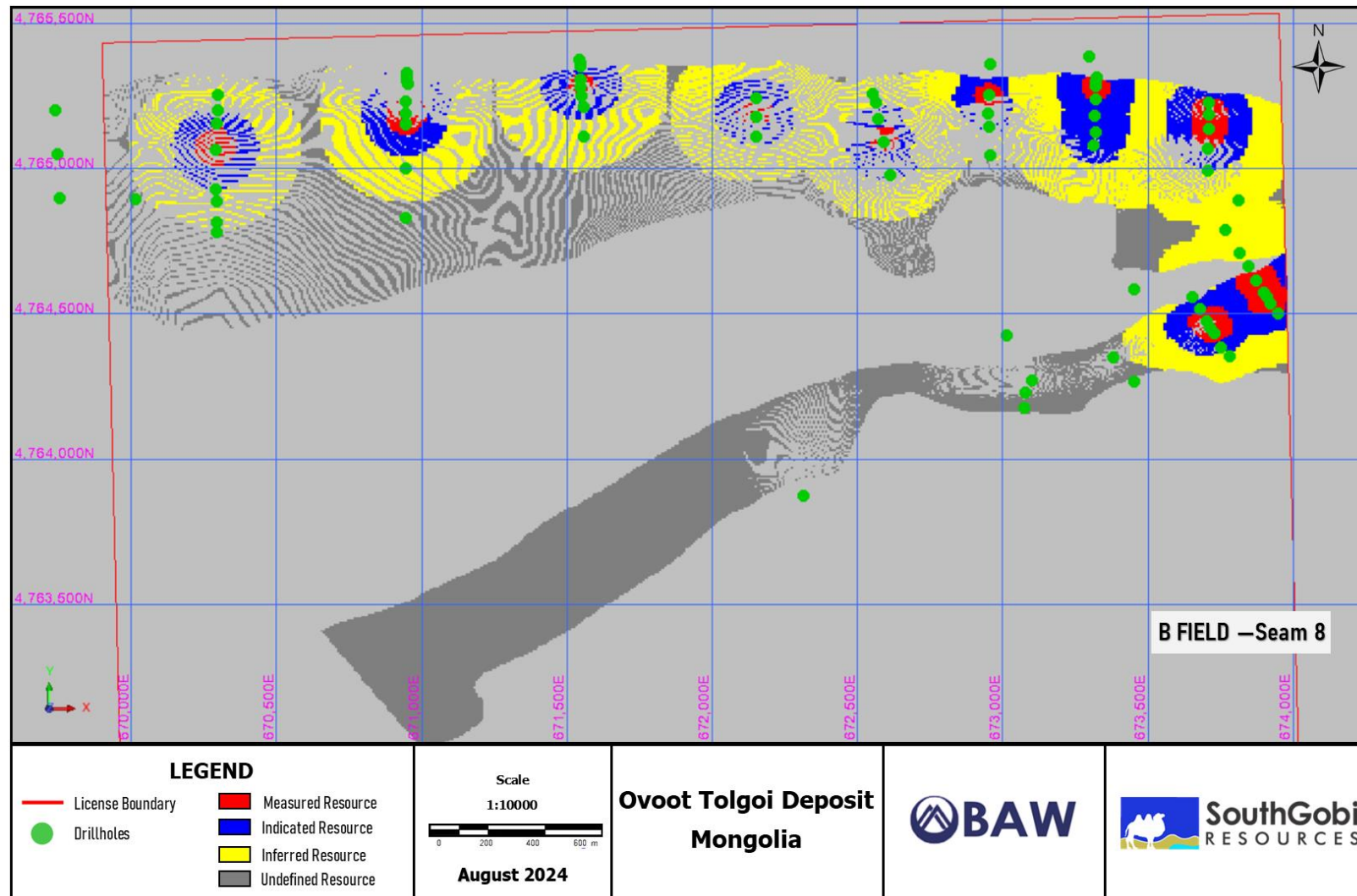


Figure 28C-13. Plan-view map of the resource estimation and classification of Seam No. 8 of B Field

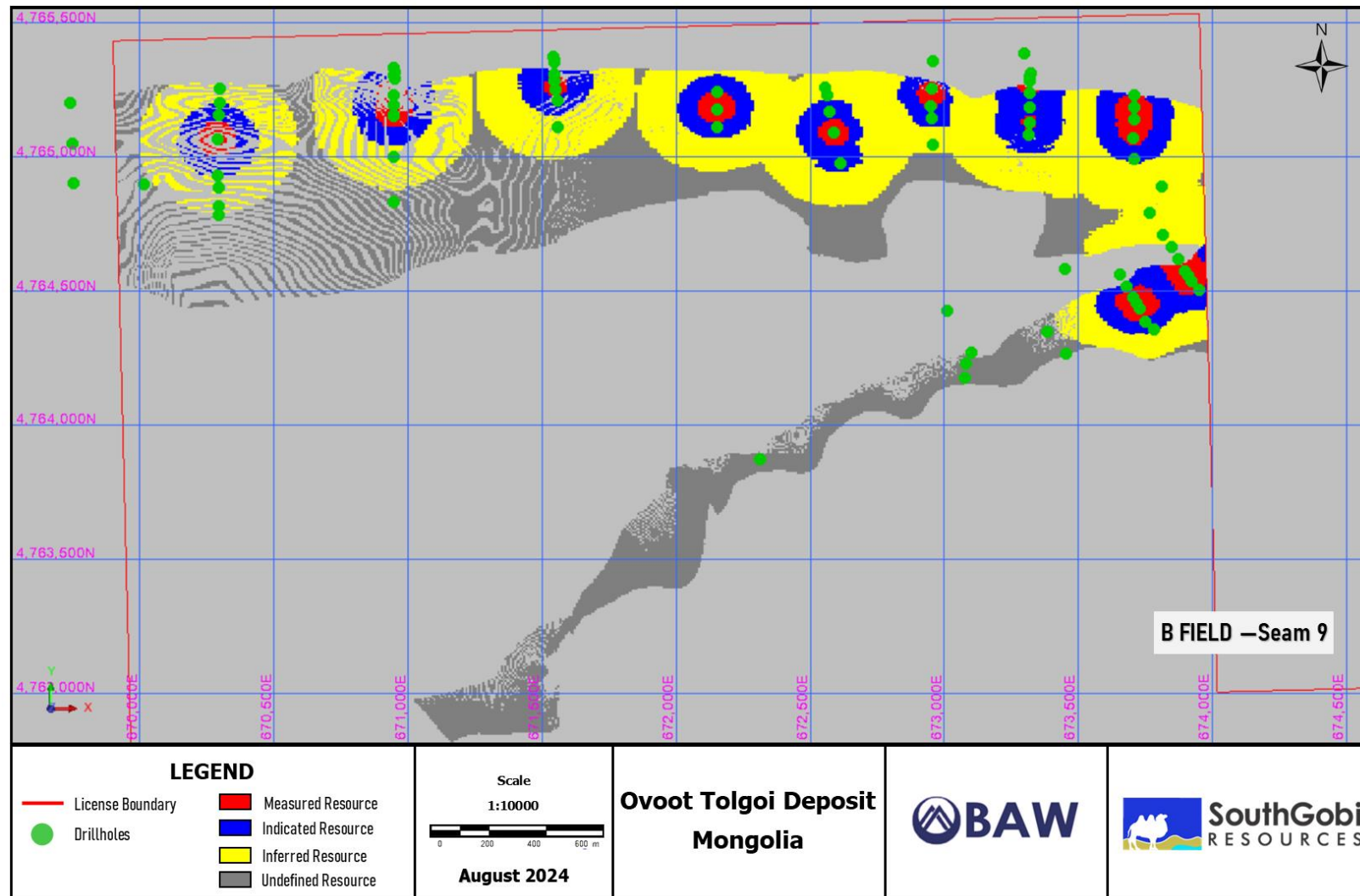


Figure 28C-14. Plan-view map of the resource estimation and classification of Seam No. 9 of B Field

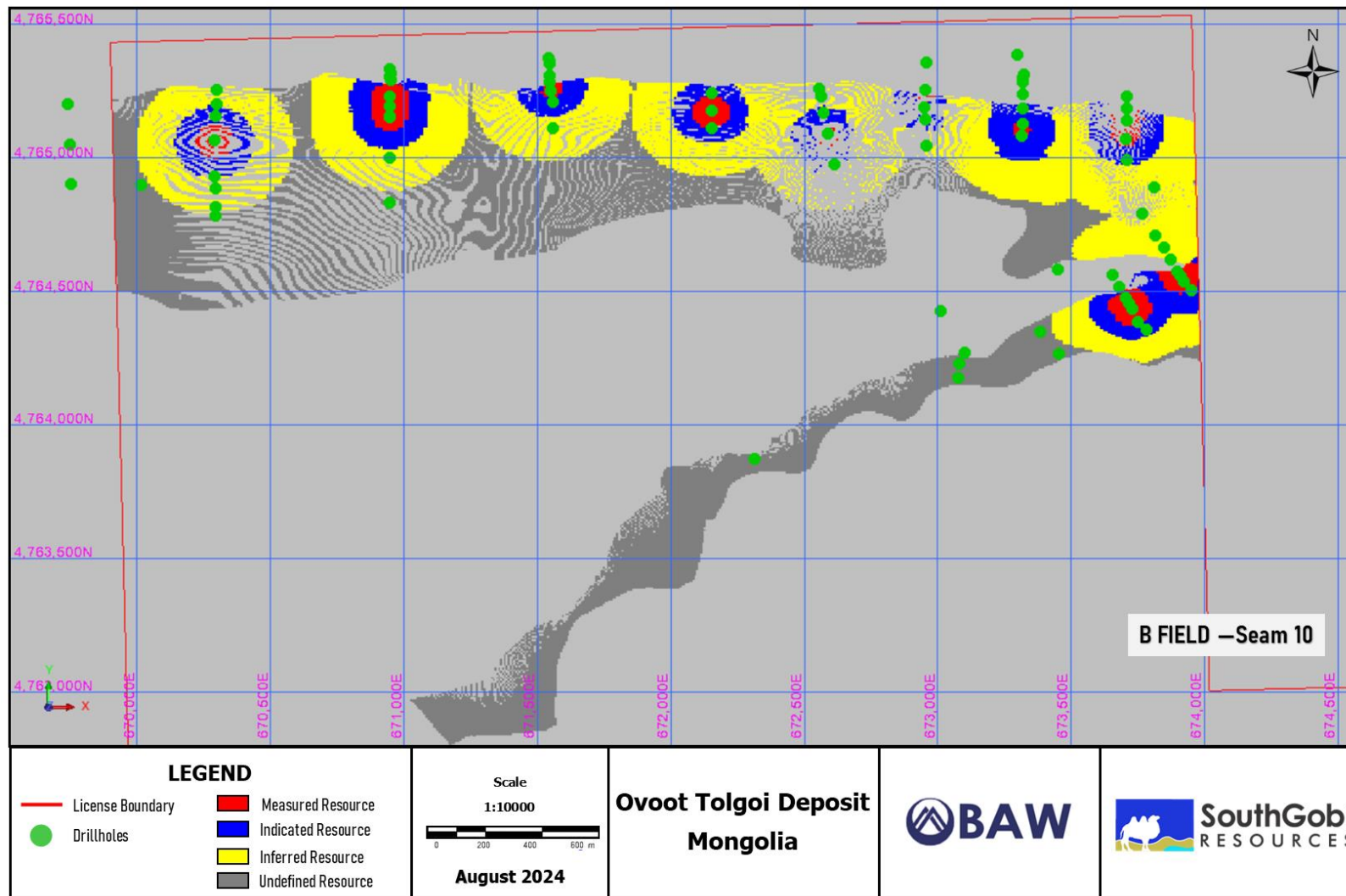


Figure 28C-15. Plan-view map of the resource estimation and classification of Seam No. 10 of B Field